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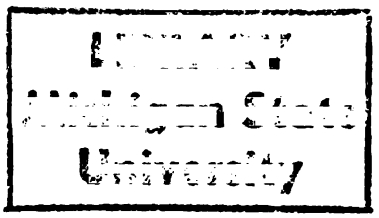

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SOCIODEMOGRAPHIC, EDUCATIONAL AND ADJUSTMENT FACTORS
IN PERSISTING OR DROPPING OUT
AND PREDICTIONS OF THOSE AT RISK FOR NOT GRADUATING

presented by

Dorothy Lucille Mercer

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Counseling Psychology

Linda Ferrist
Major professor

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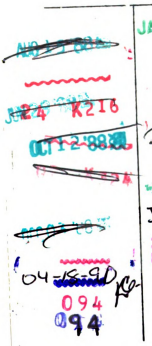

UNDERGRADUATE WOMEN, OVER 24: SOCIODEMOGRAPHIC, EDUCATIONAL AND ADJUSTMENT FACTORS IN PERSISTING OR DROPPING OUT AND PREDICTIONS OF THOSE AT RISK FOR NOT GRADUATING

By

Dorothy Lucille Mercer

A DISSERTATION

Submitted to
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1986

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ABSTRACT

UNDERGRADUATE WOMEN, OVER 24:
SOCIODEMOGRAPHIC, EDUCATIONAL AND ADJUSTMENT FACTORS
IN PERSISTING OR DROPPING OUT
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Undergraduate women who were at least twenty-five years old at Michigan State University's September, 1984, registration were contacted in a blind three-wave mailing over two weeks in early summer, 1986, in an attempt to predict who will persist to graduation and who will drop out.

The 363 returned questionnaires of 584 delivered represent a 62.2% return rate.

The mean age of the women in this study is 34.55 years. Twenty-eight percent are single, 50.4% married and 17.7% divorced. Fifty-six percent are mothers. Mean income is $20,000-$24,999. During their last school year, 40% worked half- to full-time; 28% were unemployed; one-half were full-time students. Mean grade point averages (GPA's) are: 3.01 prior to reentry, 3.17 cumulative, and 3.42 for the last term.

More withdrew earlier from lack of purpose or goals and returned now for their personal satisfaction.

The 194 graduates and 41 current withdrawers from the university are compared using chi squares, t-tests and ANOVA's.

Discriminant function analysis produced an equation accurately classifying between 82.4% and 86.2% the total group of dropouts and

graduates and each split-half combination. These predictors, in order of strength in the direction of predicting dropouts, are:

Less expectation of completing the degree without further breaks
Fewer total reasons given for last entry into college
Greater happiness during school
Possession of a previous degree
Lower rating of how well she is getting wanted things out of life
More hours per week of employment
Finances seen as less of a problem
Lower cumulative GPA
Lower (more external) Duttweiler's Locus of Control Scale score
Single status

Dropouts also are likely to have higher family incomes, handle crises less well, have more previous education, be part-time students during their last year, and have lower most recent term GPA's than do graduates but do not differ in age, marital or parental status.

With marital status as a separate independent variable, life satisfaction during and since school, achieving what is wanted in life and self-esteem all affirm the prediction of graduates being better adjusted.

A combination of sociodemographic, educational and psychological adjustment variables appears to be an appropriate, useful predictor of potential graduates and potential dropouts.

ACKNOWLEDGEMENTS

My doctoral committee members are a group of special people whom I value as individuals and to whom particular appreciation is due: to my chairwoman, Dr. Linda Forrest, for her role modeling and for raising the cogent issues, focusing my attention and challenging me to see a better picture; to Dr. Sam Plyler for his steady presence and his firm and contagious beliefs in my ultimate success and that many possibilities remain within reach; to Dr. Mildred Erickson for breaking the ground at Michigan State for older students and for her unfailingly cheerful availability to think through the next steps on the path with me, and to Dr. Albert Aniskiewicz for broadening my understanding of people and for remaining so helpful as the path twisted and turned.

I am most grateful to Diana Algra who made this project possible by so willingly giving her sponsorship and labor to the reproduction and mailing of the survey itself.

My understanding of the mysteries of computerized statistical analysis has been greatly enhanced due to Dr. David Solomon's assistance.

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and Elizabeth Spata and many other friends for concrete assistance and for quiet cheering when the journey appeared bleak.

Especially I value those who lived through the process with me and who made major accomodations for many years to make it possible: Todd and Andrew Mercer. And to my mother, Ida Dewey, who was always helpful and forever proud, thank you.

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CHAPTER 1

STATEMENT OF THE PROBLEM

A "quiet revolution" is taking place on college and university campuses across this country (Apps, 1981). It began in the 1960's and 1970's and continues to build. This revolution is the return of thousands of adults to higher education. The increased numbers raise a new dilemna, "...that colleges and universities can not continue with business-as-usual" (Apps, 1981, p. 11). This change is coming about, according to Bishop and Van Dyk (1977), because of the increased numbers of convenient colleges offering courses tailored to adults, the need to learn new skills to replace those made obsolescent by technological progress, and increased desire for training to enable professional advancement.

Cross (1981) sees the reasons for this change as a mixture of declining traditional female roles and rising new roles coming about from children entering school earlier and staying in school longer, an increase in divorce, and technological changes reducing time needed for family and home care. A further reason is the resulting social change including the explosion in the need of women to work made neccessary as a consequence of these other changes. The problem is that wife and mother roles have not changed as rapidly and continue to exert their pull on the women who are going into the educational and working world. Social and technological change push women out of the home while labor market and educational opportunities pull women out. Education then often becomes the mode of transition from home to work.

Lipman-Blumen (1975) cites recent trends for women: They are "living longer, postponing maternity, having fewer children, more often having no children, heading more households, and living alone more often" (p. 680). Clarke (1975) points out that while women once had two stages of life, pre-marital and child-bearing, the increased life-span now gives an equivalent of a second life after the last birth which generally occurs around age 30. It is this "second life" that is frequently used for education and a career.

THE HISTORICAL PICTURE

Historically older women in higher education have either not been valued or have been rejected or neglected. McDonald (1979) cites that in the mid 1800's the debate on women was whether or not to even allow them to enter college. She quotes a college president in the 1850's who wrote, "Of what use degrees are to be to girls, I don't see, unless they addict themselves to professional life" (p. 10). For years the idea that the women belong in the home was emphasized. Back in 1909, Wells said, "It is for the advantage for mankind that superior women should become mothers" (p. 733). Citing the decreased birthrate for college women, he feared that the idea of higher education for women could both make them feel too superior to men to marry them and could "deplete the stock." He worried, "If women's interests become materialized women will surely be degraded to the base level of all material competitions" (p. 739). However, he recognized that "Training of women is both natural and inevitable" (p. 731).

There was little change by the time Goodsell wrote in 1924:

> "The ideal of womanhood for the ages has been a modest, docile, clinging creature, trained in home-keeping arts, with physical charms sufficient to compensate for an empty mind, and with unlimited capacity for self-immolation" (p. 7).

He asked if higher education is "unfitting" women for marriage and motherhood and if those women are leaving maintenance of the race to the lower classes. In more recent times the psychiatrist, Monsour (1963), takes up the strain saying, "A man's task is to learn things; a woman's is to train" (p. 17). He further asserts that females are hard to educate at certain times of their lives: during adolescence, when in love, and when having a baby. In their late twenties to the mid-thirties after cessation of child bearing, he says women are at a "critical age" when education again is possible and there is a "real force toward independence" in women.

The President's Commission on the Status of Women in 1963 says,

> "The means of aquiring or continuing an education must be available to every adult at whatever point he or she broke off traditional normal schooling. The structure of adult education must be drastically revised. It must provide practicable and accessible opportunities, developed with regard to the needs of women..." (American Women..., 1963, p. 13).

However, ten years later Mitchell (1974) reports,

> "We may be relatively sure that he (the over-35 student) is not being identified as a particular student and is not really being encouraged and supported in his college program" (p. 22).

Harrington (1977) confirms this view:

> "When asked if his institution should teach adults and help them with their problems, the president of a prestigious midwestern university snapped to his colleagues, 'I'm too busy for that. I have too much to do. I can't do everything. Let somebody else take care of the grownups'" (p. 8).

Watkins (1974) asserts, "A second women's liberation movement is underway, this one on the nation's campuses....The college and university response has been both positive and negative--and generally slow." While she affirms that some schools began to adjust in the sixties, "The vast majority of institutions appear not to notice" (p. 6).

As recently as 1974, even the title of the article used by Glass and Harshburger of "The full-time, middle aged adult student in higher education" refers only to male students, not just a generic "he" used for all students. And it is not by chance that a title used in 1979 by Daniels begins, "Welcome and neglect: The ambiguous reception of re-entry women...." Fischer-Thompson (1981) points out that when the last adult surge came to higher education, the World War II veterans were welcomed, had wives to take care of their children if there were any, received federal financial support, and gained much praise and encouragement for their educational efforts. The women in today's surge too frequently go without that encouragement and often must cope with discouragement from family and friends as well as from the institutional response.

> "They may be told that they are too old and too late, and that they should be home taking care of their family, and they often have problems even getting financial assistance and childcare" (Fischer-Thompson, p. 1).

MORE BENIGN VIEWS

The popular literature has perhaps been more encouraging and more responsive to the phenomenon of the older student going to campus than the institutions themselves have been. The Farm Journal in 1962

raises the issue with an article whose title asks, "Should Mom Go Back To School?" (Gillies, p. 59). In a 1963 article called "Women: Second Wind", Time says, "Nobody's more noisely dissatisfied than that symbol of stability--the 40'ish housewife with teenage children and a reasonably successful husband," and suggests education as a good alternative (p. 56). Articles in the mid-seventies were in such a variety of magazines as Working Woman (Bestor, 1973), Weight Watchers (Westin, 1975), and Dynamic Maturity (Carlson, 1977) which all encourage older women to return to school. Articles in the eighties have appeared in Psychology Today (Cottle, 1980), Newsweek ("Grownups...", 1981), and Essence (Smalley, 1982) which urge that if you are thinking of more higher education, "Do it now" (Smalley, p. 40). The emphasis on higher education in these articles has been very positive.

Beginning in the mid-70's, major newspapers began touting older students. Early emphases were on successful older students as in the Wall Street Journal's front page article, "Mrs. Suzy Coed: More Older Women Return to College; Most Do Very Well" (Elsner, 1972). Later front pages emphasize the economic impact of the "Graying of the Campus" (Graulich, The Wall Street Journal, 1977) and colleges' need for these students (Maeroff, New York Times, 1978).

Perhaps more attention will be paid to the older student as more and more schools agree with people like Milton Stern, Dean of University Extension at Berkeley who asserts that the new older consumers of education,

> "...are not automatically ours to educate. We do not get them to enter merely by opening the doors. Adults who pay for their

> courses--or whose companies pay--will look carefully at what we have to offer." (Hechinger, 1975, p. 18)

Weinstock (1978), speaking of returnees over 55, reminds us to pay attention to those older of the older learners because they have the expendable dollars for school. And the Carnegie Commission (1973) warns,

> "Higher education will no longer be a growth industry unless an entirely new constituency can be attracted to its institutions, and unless continuing education becomes an accepted pattern in our society." (p.6)

THE OLDER STUDENT

The older-than-traditional students are the hope of the future and the oft-neglected resource of the present for higher education. They are increasingly the more flexible source of new members of the student body as the traditional 18-22 year old population is shrinking. Older students show vast heterogeneity relative to age, amount of education previously completed, experiential and work backgrounds, financial autonomy or dependence, and personal, family and social commitments. Each comes as a result of a deliberate action out of a different context and perhaps having a different motivation than that which may bring a traditional-aged student to college. When students complete high school, they and their peers are considering and discussing what to do with their lives and whether and where to go to college or to get a job or to marry. At that stage, going to college is a normal developmental choice made by approximately half of all high school graduates (U. S. Bureau of the Census, 1983b). The college experience is then their way of establishing identity and autonomy.

However, to come to college after being employed, raising a family, being a full-time homemaker and/or volunteer, or combining some of these activities is a very non-traditional decision. It is made with fewer knowledgeable supporters (counselors, teachers, peers) readily available at a time when a person has already filled his or her available time with other activities. Something has to shift within their lives to permit time to go to school. Roles must be changed or added. Finances have to be stretched or changed to accomodate paying for college. This decision at a later stage of life is to become a non-traditionalist--to do something less expected, less usual, and sometimes less supported by family, friends, and/or colleagues.

Despite the fact that older students come with often unacknowledged strengths such as academic abilities, the breadth added by life experience, and rather high motivation, this is still clearly a time of change and transition (Greenfieg and Goldberg, 1984). Muskat (1978b) believes that returning women are in a state of psychological transition and of conflicting pressures, but that they can gain self-esteem and autonomy through this transition.

Although Muskat thus sees college as a period of growth, Wertheimer and Nelson (1977) suggest women need to already be psychologically strong before coming to college: "A woman must overcome conditioning from childhood before she decides that she is important enough to ask the family to rearrange its schedule to accommodate her need for further education" (p. 65). Despite this, Gray (1975) asserts,

> "The hardest part of going back to school is the actual decision to do it. Once past that the rest is much easier. Seriously committing your energies to school, possibly as a full-time student, is a sobering thought. Essentially you have got to begin believing you are not so dull that you can not pick up new ideas" (p. 13).

She also claims that although greater earnings and more opportunities are considered to be the traditional rewards for college effort, for older women students the most sweeping changes will be psychological changes which stem from growth and general consciousness.

It takes courage to believe in one's self enough to take the risks of attending school when one is older. In fact, Douvan (1981) suggests that older students who have already established their identities may even be risking their own identity now by this transition into college life. Batdorf (1976) and Douvan (1981) also point to the relative safety of college for the traditional student to learn adult roles and responsibilities while adjusting to a somewhat dependent (safe) world but note that this same adjustment backwards to dependency is a difficult step for older students.

Hopson (1981) gives a much more optimistic view of transitions:

> "A transition simultaneously carries the seeds of our yesterdays, hopes and fears of our futures, the pressing sensations of the present which is our confirmation of being alive. There is danger and there is opportunity, ecstacy and despair, development and stagnation, but above all there is movement. Nothing and no one stays the same. Nature abhors a vaccuum and stability. A stable state is merely a stopping point on a journey from one place to another. Stop too long and your journey is ended. Stay and enjoy but with the realization that more is to come. We may not be able to stop the journey, but we can fly the plane" (p. 39).

So what is this transition that is going on? Eric Erikson (1959) would call this the task of integrity, the task of accepting our own responsibility for our lives and making what we can of them. Astin

(1976c) agrees that adult women are searching for both integrity and identity. "Although men become more affiliative as they mature, women show a great need for independence, become more outward and assertive, and remove themselves somewhat from the role of nurturer" (p. 55). More and more older persons and women in particular are carrying out this transition at least in part in an educational setting.

STATISTICAL TRENDS

The data shows the college age population to be in the midst of three escalating trends. The traditional age college population is shrinking, the older college student population in growing, and the rate of growth of the older woman student population is outstripping all other growth.

According to national statistics, the traditional college age population has increased nearly 20% from 1970 to 1980 but is expected to decrease 15% from 1980 to 1990. In the decade until 1980 the 25-34 year old population increased 43% and is expected to gain another 14% by 1990. The most radical change is in the 35-44 year old population, which increased 11% from 1970 to 1980 and is expected to increase 42% by 1990 (Trends in Higher Education, 1982). The 18-24 year old group is expected to have peaked in 1981 and to have declined by five million by 1990 (U. S. Bureau of the Census, 1983b). By 1981, students 21 and under at all levels became a minority, and women 25 and older had become one fifth of the student body (U. S. Bureau of the Census, 1983a). The sagging birthrate which led to a drop of 600,000 first graders in each of the years 1973, 1974, and 1975 is causing a corresponding drop in the traditional college age population

from 17 million in 1978 to 13.5 million in 1988 (Hechinger, 1975). As the median population age changes from 27 in 1970 to a predicted 34 in 1990 and to over 37 in the year 2000, colleges and universities will have to be prepared to respond (Ostar, 1981). A Carnegie Council (1980) expects that by the year 2000, at least 50% of undergraduates alone will be over 22 years old.

Our total higher education enrollment grew 41% from 1970 to 1980 but is expected to have no further growth by 1990 (Trends..., 1982). In fact it is projected that while those age 25 to 64 will increase their enrollment by nearly one million by then, those 14 to 24 will decline in enrollment by approximately 800,000. Because many older students will be part-timers, their increase will offset about 70% of the decline (Magarrell, 1981).

While from 1972 to 1981 college enrollment increased 33%, it increased 63% for women (U. S. Bureau of the Census, 1983a). Furthermore, while in 1972 (which was the first year college data was kept on all ages) there were 100 men to 74 women, by 1981 the preponderance had switched and there were 108 college women to 100 college men (U. S. Bureau of the Census, 1983a). At about the same time that students 21 and under became a minority, so did men. Women increasingly hold an edge in each age bracket until those over 35 have a nearly 9 to 5 edge over men (Magarrell, 1981). Women passed men in 1979 in college as a whole, in 1978 in undergraduate programs, and in the 25-34 year age bracket in 1980. They had already passed men in the over-35 age bracket before 1970 when data was not kept on the highest age brackets. Women passed men in Michigan in college in

1980 (U. S. Bureau of the Census, 1983b). While men slacked off on completion of college in the later 1970's, women steadily increased in the proportion of completion. Twenty-three per cent of 25-29 year old males are now college graduates and 20% of similar women are.

Not all students who enter college, however, remain to complete their education. The cumulative data on females shows that many drop out after the freshman year and even more after the sophomore year. There is then a major slacking of dropouts following the junior year. Approximately half of those who begin college do graduate near schedule.

Many who drop out at an earlier age come back later to complete what they began. Of women 25 and older who begin college, singles are more likely to get a degree, marrieds next, divorced women third, and widows least likely to get a bachelor's degree (U. S. Bureau of the Census, 1984). Over one third of those with four years of education continue their education (U. S. Bureau of the Census, 1984).

All this data shows the increasing importance to higher education of older women and shows that they may have increasing clout in the academic world simply because of their swelling numbers. Although a large share of the growth in higher education has gone to two year community colleges, four year institutions are now getting a larger share of the increase.

In a time of shrinking enrollments, the competition between colleges to get and retain students is intensifying, for to lose enrollees is to lose the financial support which allows colleges to retain the personnel, courses, programs, and services they see as

neccessary to their existence. As the traditional age student population declines, the attractiveness to the colleges of the adult student increases. Older students can fill the empty chairs and coffers--if they can be attracted and retained. It may become increasingly important to attract their interest, to woo them into entering college and then to design their experiences in ways to keep them as students in what may be a difficult and taxing experience.

PURPOSE OF THE STUDY

Although it is useful to understand older women students to know who are likely candidates to be wooed into colleges, it is equally important to know what causes them to do better or worse while in college and know why some remain to graduate and others drop out. Only with this knowledge can a college which truly wants to attract and keep older students plan which external or situational variables need adjustment to facilitate older students' acquisition of an education. Educational institutions need to discover how to identify and offer support to women at risk for doing less well and/or dropping out. If some common features can be identified, then we can turn to designing ways to target and help subgroups of older women to remain in and to succeed in school.

The question is, who copes and stays and who doesn't? Anecdotal data began to accumulate which conflicted with an early hypothesis that women in the midst of situational/personal stress would have extra difficulty achieving or staying in school. While this appears to be true for some women, others with apparently equal stresses and

demands are staying and apparently succeeding. In fact, the anecdotal data appears to be saying that part of the reason for better grades in older women is that they set and achieve high standards for gauging success. These succeeding women still repeatedly cite financial problems, adequate time, balancing of many roles, family demands, and personal expectations as being burdens. Continuing discussions and inconsistency of concrete indicators lead to a new approach.

The hypotheses of the present work are based on the theoretical premise that people in good psychological health are better able to cope with all aspects of their lives. If so, well-adjusted older woman students will persist and get better grades than will those with poorer psychological health despite variable stressors or socio-demographic variables. Specifically, people who feel they do have power in their own lives and feel confident and generally happy and satisfied should manage many situations including college better than those who feel much of their lives are controlled by luck or by external persons or events or those who feel unsure about themselves and unhappy or dissatisfied with how their lives are going.

Because it is difficult to differentiate who among current students are "doing better" than others (Grades have been the primary criterion but some question whether that criterion is adequate), this study attempts to identify variables which differentiate recent older women college graduates at the baccalaureate level from recent college dropouts. Using these variables, we can make predictions as to which current students may be more at risk for not completing their studies. It is hoped that some day educational institutions will attempt to

identify these students early in their college careers and design special ways to improve their chances of staying in school.

Several demographic and situational variables are studied and used first, to describe the population, second, to find any correlations with persisters or dropouts and with higher/lower grade point averages (GPA's), and third, to use in discriminate analysis. The hypothesis that selected psychological components are able to differentiate students who persist and/or get better GPA's is tested. All variables are used to find those which best differentiate the persisters/drop out and higher/lower GPA groups and those which may indicate higher chances of either success or risk for older women undergraduates.

HYPOTHESES

The primary hypotheses are:

H1: Among women undergraduates recently in college, those who persist to graduation are more likely to show better psychological adjustment, as measured by having higher self-esteem, internal locus of control, reporting more happiness and life satisfaction, coping better with crises, and feeling they are getting more of what they want out of life than those who drop out.

H2: Among women undergraduates recently in college, those who persist to graduation are more likely to have believed that they would graduate than those who drop out.

H3a: Among women undergraduates recently in college, those who persist to graduation are more likely to have higher total Grade Point Averages than those who drop out.

H3b: Among women undergraduates recently in college, those who persist to graduation are more likely to have higher recent Grade Point Averages than those who drop out.

Secondary hypotheses are:

H1: The measures of psychological adjustment will be significantly correlated with each other.

H2: The women who persist to graduation and the women who withdraw from college will not be significantly different on the sociodemographic variables of age, marital or parental status, income, or employment.

H3: An equation of variables can be formed which significantly distinguishes dropouts from graduates and distinguishes groups of current students who will be predicted to graduate from those who can be expected to drop out.

CHAPTER 2

REVIEW OF THE LITERATURE

A review of the literature reveals that many articles and some books are based on simple theorizing or on data primarily informally gathered or on limited data from, for example, only one or two support groups. In selecting material for review here, articles without basis in research were rejected unless they offer some useful theoretical strength. Findings are used only from studies which have been adequately done and are not used, for example, if results are based on an informal group or if conclusions were drawn from a few interviews or if the methods of data gathering and analysis appear to be missing or inadequate.

The newer literature is becoming increasingly sophisticated statistically and therefore is often somewhat stronger. Much of the older cited literature is primarily or purely descriptive, since frequencies were then the primary tool used to assess data. More recently many more and varied tools are used. However, throughout this review, only the better studies and literature reviews of the time or of the subject are cited. This critical selection of literature means a majority of the citations found are omitted here primarily due to their weaknesses.

The literature is vast since many topics are included in this study of older women undergraduates. Much of what is written is on the traditional-aged student, much is on students of all ages and both sexes, some is on older students in general, and some is on older women. Although some issues such as reasons for return to college or

barriers to return appear to have been overstudied and information has become quite redundant (and therefore not further cited), a breadth of background is needed on several topics to appropriately understand the complexity of sociodemographic, educational, experiential and psychological variables of interest in this study.

AGE DEFINITION

Unfortunately there has been absolutely no uniform definition of the older student. Some of the literature simply calls them "adult students" with no definition as to age (Burgess, 1971; Morstain and Smart, 1977). Others give no definition but at least speak only of women (Marple, 1976) or give some non-age definitions. Ancheta (1980) calls full-time day students "traditional" students and considers that part-time evening students are non-traditional and presumed to be "mature". Farmer and Fyans (1983) study women who have been out of school two years and are married. Tittle and Denker's (1977) major literature review of re-entry women covers those who have been out of school at least a few years and are in credit courses currently. Other definitions give either just a minimal age or add a requirement of having been out of school for at least two or more years. These minimal ages begin with 20 year old freshmen (Reed and Murphy, 1975) or 21 year olds (Perkins, 1961) with these labelled by Roelfs (1975) as "late bloomers, lifelong learners, retrainees, job upgraders, veterans, housewives, senior citizens, and dropouts" (p. 5). Others begin at 23 (Doty, 1966; Hiltunen, 1965; Ice, 1971; Myers, 1964), 24 (Stephan and Wheeler, 1969) or 25 (Aanstad, 1972; Adelstein, Sedlacek, and Martinez, 1979; Kimmell, 1976; Roehl and Okun, 1984; Sensor, 1964;

Smallwood, 1980; White, 1984). A few begin in the later 20's (Erickson, 1968: 26; Kasworm, 1982: 26; Badenhoop and Johansen, 1980: 28; Erdwins, Tyer and Mellinger, 1980: 29). Others start at 30 (Kaplan, 1982; Kahnweiller and Johnson, 1980; Rawlins and Davies, 1981; Reehling, 1980) and 35 (Hooper, 1979; DeWolf and Lunneborg, 1972) or at higher ages (Bross, 1967: 40; Hooper and Traupmann, 1984: 50; Hooper and March, 1978: 62). Age variations make comparison of studies difficult.

Because 25 appears to be the modal age definition and because the census data on students uses an age bracket beginning at 25, that minimum age will be used in this study. Much useful data is missed by beginning a study at a much older age than 25, and those in their mid-twenties have lived enough adult years to have probably established some non-student life experiences and life style variations which are of value in most studies.

TERMINOLOGY

The terminology to describe the students who are older is diverse. "Non-traditional" has often been used (Anchata, 1980; Dwinell, 1980; and Warchall and Southern, 1986). This language, though, seems to be confounded because the same term is used for women students in fields which are or have been primarily male dominated (engineering, medical or law school, etc).

"Returning" or "re-entry" is commonly used (Adelstein, Sedlacek, and Martinez, 1979; Hooper, 1979; Roehl and Okun, 1984; Tittle and Denker, 1977). However, here the emphasis is on absence from school

rather than age, and the term seems as appropriate for a 20 year old as it is for an older student.

"Adult student" is probably the most prevalent term in recent research and is likely to become the normative term (Burgess, 1971; Marple, 1976; Morstain and Smallwood, 1980; Rawlins and Davies, 1981; Smart, 1977; White, 1984). This term seems to connote that those younger than the defined age are not really adults, a perception which could further widen the rapport gap some perceive between the students of traditional and of non-traditional ages.

"Mature" adult or student is also used (Aanstad, 1972; Doty, 1966; Erdwins et. al., 1980; Hooper and Traupmann, 1980; Kaplan, 1982; Myers, 1964; Perkins, 1961; Reed and Murphy, 1975; Sensor, 1964; Stephan and Wheeler, 1969). Again, this leaves a stigma of the traditional age student being seen as immature.

Therefore this research will use the term "older student," since specifically an age factor is used to define the population and since this term is less likely to be confounded than "non-traditional," to be less exclusive than "returning," and to be less alienating than "adult" or "mature" students. This term has been used previously (Bross, 1967; DeWolf and Lunneborg, 1972; Hooper and March, 1978; Kasworm, 1982; Roelfs, 1975). (Kimmel, 1976, uses the term "older-than-average").

CHARACTERISTICS

What do we know about the characteristics of the older student population? Many of the studies have been done on mixed-sex samples, some of which separate the sexes in the analysis and some of which do

not. The married rate varies from a low of 58% (Geisler and Thrush, 1975) to a norm of 75-77% (Erickson, 1968; Folland, Pickett and Hoeflin, 1977; Johnson, Wallace, and Sedlacek, 1979; Steele, 1974). Some studies lump those widowed, separated, and divorced together while others give these as three categories. The divorced rate is blurred because of the lumping, but varies from approximately 8% (Erickson, 1968) to 15% (Magill and Cirksena, 1978) or possibly more. Sands and Richardson, 1984, have 29% in the non-single non-married category. Singleness ranges from frequent single digit figures beginning at 5% (Sands, et.al., 1954) up to 25% (Geisler and Thrush, 1975). The rate of having children varies from approximately 50% (Johnson, et, al., 1979) to 90% (Steele, 1974). One study of 303 "nontraditional" women in a college of education shows frequencies quite different than these normal frequencies. Therefore, her findings are reported separately: Dwinell (1980) found only 48% married, 20% divorced, and 29% single while only 43% had children.

Although the various beginning ages confound the data, the majority of the studies show an average age in the early to the mid 30's and a modal age often in the upper 20's to near 30. The mean number of years out of school varies from three or four to fifteen or more. The majority have previous college education varying from 61% (Steele, 1974) to 97% (Geisler and Thrush, 1975). Although a few studies cite that a minority are working (Magill and Cirksena, 1978: 23%), most show at least 50% of the older students work.

In a major summary study, Cross (1981) cites Solmon, Gordon, and Ochsner's analysis of 172,400 freshmen over 21 from 1966-1978.

Results confirmed an earlier study in which, compared to college students of traditional age, the older students were more likely to: 1. be socio-economically disadvantaged, 2. be more concerned about financing education, 3. have made lower grades in high school and four year colleges in their major field, 4. see college's benefit as monetary, 5. have lower educational aspirations, 6. have more difficulty in universities and least difficulty in community college, and 7. be more prone to dropping out and dropping in. Since these were freshmen, though, it is highly likely they are different from the majority of older students who had some college education previously.

Ostar (1981) summarizes adult learners differently saying they are: better educated than non-learners, better off financially, more likely to be employed and to be professional or technical workers, more likely to be single or divorced, and slightly more likely to be urban. This description seems to better fit the total population of older students.

ABILITY AND ACHIEVEMENT

Pertinent questions about these older clientele of academia include: What is the ability they bring with them when they come to education? And how well can they achieve academically since that is the standard measure used in higher education?

It has long been assumed 1. that ability declines with increasing age and 2. that older students simply do not have as much intelligence or are not as capable of learning as younger students and are, therefore, more susceptible to failure. Owens (1966) studied Army veterans who were first tested in 1919 and were retested in 1950 and

1961. The longitudinal data shows "...relative constancy in mental ability test performance" in the decade between their 50's to the 60's (p. 311). Several studies show that verbal abilities either do not decline with advancing age (Lunneborg, Olch and DeWolf literature review, 1974) or may actually increase (Honzik and MacFarlane, 1973), particularly with activity in educational activities (Lunneborg, et.al, 1974). This is supported by Stephan and Wheeler (1969) who add that each increasing age category does better than the younger age category (with the oldest category being 40 and over). Cagiano, Geisler, and Wilcox (1977-1978) show a significant GPA difference for those whose education had been interrupted with the GPA increasingly significantly higher with longer interruptions. They interpret this finding to be a result of increased maturity, motivation, and purpose. Knox and Sjogren (1964) find no difference between older and younger students on the WAIS or in experiments to test learning ability. It appears that Lunneborg, et.al. (1974) are correct in saying the longitudinal data is more important and does not support a decline of intellectual functioning with age.

Older students do better than younger students academically in studies of welfare mothers (Young, 1977), of women over 40 (Halfter, 1962), of community college students over 21 (Preston, n.d.) and of university freshmen (Hull, 1970). Reed and Murphy (1975) find sex differences with women doing better than men. Hansen and Lenning (1963) find older students do better than younger, and women of all ages have better GPA's both in high school and in college than do men. In studies comparing older students to freshmen norms, Lunnenborg,

et.al. (1974) discover that for both sexes, the older students average at the 75%ile of freshmen norms on verbal and 25%ile of freshman norms on quantitative scores. Hiltunen (1965) finds older women to be at the 80%ile verbal and 33%ile quantitative. Although Hull's (1970) older and younger students have nearly equal ability test scores and high school ranks, the older students perform significantly higher than predicted but the younger do not.

On qualifiying examinations or entrance tests, older students frequently do more poorly than traditional-aged students (Perkins, 1971). But once they actually enroll, the evidence is relatively uniform that older students will have significantly better GPA's across both sexes than the traditional age students (Ice, 1971; Byrne, 1974) and that women get better grades than men (Ice, 1971; Carnegie Commission, 1973). Byrne's (1974) less expected finding in a well-done dissertation is that married older students do better than single older students. This dimension is rarely studied.

It thus appears that older students are quite capable although they may have some difficulties with quantitative subjects. They do achieve academically, even better than younger or male students. The next question is: Can we predict which older students or specifically older women will have better academic performances?

Lavin's (1965) literature review of attempts to predict academic performance is representative of studies of traditional-age students. He finds the best single predictor for traditional students was high school GPA or rank, but men are more predictable than women. He finds no consistent findings relative to anxiety, mixed results about

motivation or need for achievement, a positive relationship between introversion and academic performance, some negative correlation between lack of impulse control and school achievement, and a correlation of self-image of intellectual abilities with increased GPA. In an attempt to find appropriate predictors for older students' grades, Lunneborg, et.al. (1974) find no individual significant correlations with background characteristics or tested abilities and find that high school GPA is as good a predictor as recent test scores. Their regression formula does show the background variables of high school grade point average, activities engaged in in high school, years since having been a full-time student, having an advanced degree goal, and expected years to the bachelor's degree all are more important to multiple prediction than is test performance. Metz (1966) reports the high school GPA is not as valuable a predictor for returnees as it is for traditional students. This agrees with Cagiano, Geisler, and Wilcox (1977-1978) who say that the GPA is a less valuable predictor if people are out at least three semesters.

Apparently we have not yet found good predictors for academic achievement of older students. Since such predictors are not found in the more easily studied concrete variables, it appears to be time to look for such predictors in the internal makeup of the students rather than in their social or academic histories and abilities.

NON-ACADEMIC COMPARISONS OF OLDER VERSUS YOUNGER STUDENTS

What do we know about older women students besides their demographic and academic characteristics which could help understand why some remain in school and others leave?

Several studies compare older versus younger college students on the dimensions of personhood, values, psychological make-up, needs, and orientations. As Badenhoop and Johansen (1980) cite, older undergraduates have more going for themselves, are not just being pushed by parents, and have therefore higher educational goals and consequently higher GPA's. Several studies simply note that their wealth of life experience makes more well rounded persons and more experienced persons who come back to school, which is both an asset and a detriment in a university or college setting (Apps, 1981; Krings, 1976). They know why they have come back and are very purposeful and are willing to work to achieve it (Apps, 1981). Although they are adding a role (compared to those younger persons for whom being a student is the primary role), their advantage is that they have already demonstrated they can handle responsibility and are more likely to know what they want out of life and are willing to make the sacrifices to get it.

Older undergraduate students' value priorities are different than those of their non-student peers but not different than those of traditional-age students (Pirnot and Dunn, 1983). Women students over 30 have increased academic, intellectual, and aesthetic orientation; more liberal attitudes, less dogmatic religious beliefs, and are less interested in material possessions and social interaction while

showing more "attitudes of emotional stability" on the Omnibus Personality Inventory (Espersson, 1975). Older women students score significantly higher on the California Personality Inventory scale of achievement via independence and on psychological-mindedness than do their younger peers (Marple, 1976). They show less hostility, anxiety, and depression than younger students, in contrast to the classic picture of the depressed mid-life woman (Clements, 1974). The fear of success in women undergraduates at Rutgers is significantly higher in the younger group and for those unmarried or with no children or unemployed according to Tomlinson-Keasey (1974). She concludes that fear of success may be more connected to anxiety about one's role than to be an accurate predictor of achievement.

In a theoretical paper, Datan and Hughes (1985) describe returning women students as no longer needing to conform to the adolescent norm of non-intellectual femininity, less bounded by parental expectations, decreasingly relationship-oriented, and less bound to the stereotyped female path of finding identity through relationships. However, they see such women as more bound by relational commitments made earlier and therefore perhaps hampered now from full achievement.

While older women students are highly motivated and responsible, they are more likely to have problems in academic behaviour: "...adjusting to university life, including learning academic procedures, rusty study skills, inability to concentrate, and adjusting to problems associated with unlearning" and have "unrealistic goals, poor self image, social-family problems, and

sometimes an excessive practical orientation" (Apps, 1981, p. 51). This agrees with Krings (1976) and Knowles (1969). Krings and Knowles further believe the mature person learns best in a setting of mutual responsibility but not one of dependency and also wants learning that can be applied immediately. Older students are generally found to have less desire for forming social relationships or for attending school because someone else wants them to and to have a higher cognitive interest or internal drive for the pursuit of knowledge (Wolfgang and Dowling, 1981).

Most of these authors suggest that because of the differences between older and younger students, older students need some different design in the educational process. However, a few recent authors question this premise and also whether counseling needs to be any different. Chandler and Gaelerstein (1982), in looking at upper division undergraduates, conclude that since neither age nor sex predicted students' satisfaction or dissatisfaction with their academic experience, no special classes were needed. However, these investigators did not have a clear youth group since their youngest group was defined as being ages 20 to 29. Warchal and Southern (1986) find no difference in perception of counseling needs by age or sex and discover that the oldest have most increased concern particularly with parenting but otherwise need little special counseling. These findings are probably the result of not differentiating among older students in any way other than by age and sex and therefore perhaps disregarding possibly large minority concerns.

Johnson, Wallace, and Sedlacek (1979) find no differing needs when comparing returning women to returning men and to traditional age students of both sexes. They conclude therefore that students need to be clarified by types rather than simply by ages. Suchinsky (1981) suggests a possible framework for looking at older woman students. He describes four groups who have different needs and purposes as being the empty nester, the displaced homemaker, blue collar wife who needs income, and the oldest students who use education to center their lives and who are often recent widows (p. 31). Perhaps a new ways of categorizing these people is needed, but using such purely social or economic definitions seems simplistic.

REASONS FOR HAVING LEFT IN THE PAST

Most writers agree that the returning or older woman student did not complete her education at an earlier age primarily because of marriage (Doty, 1966; Steele, 1974; Brandenberg, 1974. Sewall, 1984, describes this as "family responsibilities". Geisler and Thrush (1975) claim that marriage and children came third with getting a job and needing money coming first and second. Most others agree that these are the top three reasons, although Brandenberg (1974) cited lack of interest as being a distant third. Steele (1974) adds that 40% of woman who left and later returned have never given up their desire to return.

REASONS FOR RETURN

Voluminous literature explains why older students, particularly women, return for an education. However, it is rather hard to

generalize across the studies because the variety of options offered in survey instruments and different ways of categorizing answers. Cross (1981), in a good summary and review, cites that the reasons still primarily fit the format used by the Commission on Non-Traditional Study (CNS) national survey. Many of this survey's items had been first formulated by Burgess (1971) although he significantly omits any personal fulfillment dimension. Cross cites the reasons in terms of desires: to know, to reach a personal or a social or a religious goal, to escape, to take part in social activity, to comply with formal requirements, for personal fulfillment, and for cultural knowledge. Her review notes that personal satisfaction is typically given as a single main reason by one-third of returnees and as one of several reasons by one-half. Knowledge for its own sake is chosen by 10 to 39%, obtaining a degree or certificate by 8 to 28%, and over one-third say that escape is a reason. She sees the main trend of the seventies as being toward an increasing proportion of personal satisfaction or recreational reasons, exceeded only by job related reasons. However, her study goes across both sexes, and older women students differ from this generalized picture.

In the sixties, a typical study asserts women return because of boredom (Bross, 1967). They are tired of volunteering and seek a refuge from a too-empty house or from the unhappiness of family or health problems and need to forge a new pattern for life. Another study adds they have an unfulfilled desire for knowledge (Doty, 1966). Erickson's comprehensive dissertation study (1968) learns that getting

a degree is the primary reason with intellectual stimulation second and utilitarianism reasons following. Surprisingly a majority of college student wives rate a degree of more importance after marriage than they had seen it to be before they had married (Hildebrand, 1967).

In the early 70's, the literature emphasizes personal growth reasons for returning to school. Letchworth (1970) sees older women students as having a second identity crisis after having resolved the first identity crisis by becoming a wife and mother. Now the crisis is whether to add a career and, if so, which career. They are also in an integrity crisis, wondering what is the meaning of life. College can help them try to understand and resolve both of these crises. In fact, half of the woman undergraduates 35 and older in one study came because of a vocational family or personal crisis (Carlsen, 1973). One-fourth in another study came <u>now</u> because of a crisis of self or family (Durcholz and O'Conner, 1973). While Carlsen (1973) finds equal vocational and personal goals for women over 35, many others find that woman came first for personal growth reasons and only secondarily to gain knowledge or to get interesting jobs (Brandenburg, 1974; Durcholz and O'Conner, 1973; Espersson, 1975; Markus, 1973; Steele, 1974).

By the later 70's the issues of personal satisfaction or desire for intellectual stimulation are still the primary motivators but career oriented reasons increase in the frequency of being indicated (Magill and Cirksena, 1978; McCrea, 1979). Folland, Pickett, and Hoeflin (1977) still say people return from a sense of emptyness, and

Lenz and Hansen (1977) describe the motivations as first being psychological, including a need to gain identity and a need to know or to try to fill the deprivation that they perceive out of their past. Secondarily, an economic impetus is escalating with the increase of divorced mothers in school. In this period Truax (1975) describes woman students over 35 as being of four types: the housewife with children now in school who is looking for challenges, the recent divorcee or widow who is preparing to work, the clerical person seeking better opportunities, and the woman who simply wants to learn.

By the 80's a switch begins. Dwinell (1980), whose women are much less married than most studies show, sees that career reasons bring back 55% of the women, personal satisfaction brings only 15%, and economic benefits bring another 9%. In a major survey of both sexes, Apps (1981) discovers nearly every woman checked both career and self-esteem reasons, including feeling that it is now socially acceptable to go back to school. Women's fourth-ranked reason in his study is that a change in life situation brought them back.

Career goals now frequently lead the list of reasons for return (Rawlins and Davies, 1981; Hooper and Traupman, 1984; Sewall, 1984). These more recent studies are also discussing more why are they coming now. In a major summary article, Cross (1982) says adults with low educational attainment and low status jobs are motivated by the external rewards of better pay and better jobs while adults who have life's necessities cite more internal rewards such as satisfaction and desire to learn. Blocker and Rapoza (1981) list persons returning to college as those needing a vertical move, those seeking satisfaction

by a career change, and those forced to change by divorce, death of spouse, unemployment, or physical or emotional handicaps.

A recurring theme is that older students of both sexes often return because of life transitions (Greenfieg and Goldberg, 1984). They claim the separated or divorced need more earning power, many need a mid-life career change, others wish to re-enter the job market, and the laid-off or resigned may want to upgrade their abilities. Aslanian and Brickell's (1980) major study hypothesizes that people return to education because of life transitions such as a job change, marriage, divorce, arrival or leaving of children, and retirement. With questions designed specifically to tap into life changes, they find that of the 83% who say transition is a motivator, 56% identify job or career motivators, 16% identify family life changes, and 13% identify transitions in leisure life patterns.

Astin (1976a) helps understand these motivations better in similarly patterned returnees by explaining that those who return with a goal of career or employment are the ones who must support themselves and the family, who need a degree to advance in a present job, who want career changes, or who are ready to return to a job because of fewer family demands. Those who return for interest or enjoyment reasons are more likely to be satisfying general interest or curiousity, to be bored, or to be finishing a degree they always wanted.

In a study solely of returning women over 50, Hildreth, Dilworth-Anderson and Rabe (1983) find nearly 70% come specifically to get the degree or the certificate, 53% to gain independence in the

sense of identity (which they called psychological reasons), and 43% come for employment preparation for a better job. These numbers closely parallel Astin's (1976b) findings from a study of 15 colleges in 1976 where the women are primarily under 50.

These reasons for returning can be placed within Houle's (1961) framework of three types of adult learners: goal-oriented learners who begin later in life and have specific objectives, activity-oriented learners who want to make social/relational contacts and are least likely to reveal this true reason for education, and learning-oriented learners who are thirsty for the pleasure of gaining knowledge and who never stop their thirst. When women began to return to school in significant numbers in the 50's and the 60's, they were probably more activity oriented and partially learning oriented, but they have become increasingly goal oriented over the years, although the other two reasons remain important.

It becomes apparent that although the reasons for return to college at a later age are as varied as those doing the research, some trends are visible. While women two decades ago may have been the more stereotypical homemakers who wanted to fill a void or avoid the pain of their lives, this negative impetus soon switched to an emphasis on college as a method of personal growth. Later the emphasis began to move toward increased career direction for women which is somewhat more like the classic reason for male education. Recently studies have begun to emphasize more the specific transitions or triggers which bring older women to college. This seems to be an

important addition to our thinking, since the very transitions which bring them can determine the strength of the desire to remain and complete an education but can also be troublesome enough in themselves to make achieving that goal problematic.

PROBLEMS AND BARRIERS

What are the problems that older women do have when they consider or do take on the student role? Are the problems concrete? Who has the power to change them? How severe are these barriers and which are the more salient barriers? How complete is our knowledge of the problems these women encounter?

Probably more is written on the barriers to reentry or the problems encountered upon reentry for the older woman student than any other one topic pertaining specifically to this group. An increasing uniformity of language has come from a format used in a literature review by Ekstrom (1972). She cites the barriers as being "institutional" which are those barriers found specifically in the bureaucracy, practices and expectations of the school; "situational" which arise from one's current life situation, and "dispositional" which are attitudes about learning and self-perceptions. It is possible that dispositional barriers determine how much of a barrier the institutional and situational problems truly are. If so, perhaps it is more appropriate to speak of "roadblocks" or "speed bumps" than to speak of barriers, since some people find ways around them or tolerate barriers when other people are defeated and do not attempt school or drop out because of them.

Institutional barriers include scheduling, a requirement to attend full-time, lack of information-giving, stiff admission or attendance requirements and bureaucratic red tape. Situational barriers include costs (books, commuting, child care, etc.); lack of time; home, family or job responsibilities; availability of child care, transportation, or study space, and support or lack of it from family and friends. Dispositional barriers include lack of self-confidence or self-esteem, fear or being too old, lack of energy, dislike of studying or indecisiveness (Cross, 1981, 1982). Almost all surveys indicate that the situational barriers, specifically lack of time or cost, top the list (Sensor, 1964; Espersson, 1975; Young, 1977; Wertheimer and Nelson, 1977; Dwinell, 1981; Richter and Witten, 1984). Other situational problems are the hours of classes and difficulties of parking and of library use (Markus, 1973).

Even though cost and time were expected to be the highest barriers, Richter and Witten (1984) learn these are experienced as even more of a problem than expected, and home responsibilities are also somewhat higher barriers than expected. Smallwood (1980) finds coordinating studies with child care and family or with a job is the primary difficulty and that knowing how to study effectively is also a problem. When Erickson (1968) allows older respondents to mark more than one problem, women mark more problems than do men. She discovers the ranking of problems to be different for women than for men, after both agree that scheduling is the primary issue. For women, family arrangements are secondary followed by time for study and exam fear. Across sexes, family arrangements are fifth. Her findings emphasize

the problematic character for women of trying to balance schooling and their societally expected role. Across age groups, Markus (1973) finds a steady 30% who do not feel a part of the university. In her study, the primary problem is less time to spend on family and friends and on housework. Looking at women's finances, Steiger and Kimball (1978) conclude women have more difficulty earning the necessary money. Further, financial aid which is designed for the full-time student excludes many older women, and current financial processes close out women whose husbands cannot or will not pay.

Cross (1982), however, raises an interesting question:

> "The major barriers reported by survey respondents are socially acceptable barriers such as lack of time and cost. But what is the real role of less socially acceptable reasons for lack of participation?" (p. 136).

Although dispositional barriers are cited by only five to fifteen per cent of respondents, "The 'real' importance of dispositional barriers is probably underestimated in survey data" (Cross, 1981, p. 106). When Wilcox, et. al., (1975, quoted in Cross, 1981) ask current students why their friends are not participating, they get a much higher expression of dispositional reasons. They assume that people are more willing to give such reasons about other people than about themselves. Another reason for underciting dispositional barriers may be that those people for whom these barriers are truly impenetrable barriers are not further analyzed because they choose to not attempt the return to school. Also, some barriers may be simply "convenient rationalizations" (Aslanian and Brickell, 1980).

Several studies cite more dispositional issues such as accomodating all roles, management of guilt/selfish feelings, shame in

relation to intellectual aptitudes of younger classmates, and the reality of being alone in a college culture (Letchworth, 1970). Dispositional factors are primary, according to Ryan (1979), and include in order: competition and inability to learn, a "sore-thumb complex," guilt about husband, home and family, the "I'm not worth it" complex, spouse disapproval and then time constraints. Krings (1976) points to mixed problems of poor educational background, inadequate study skills, lack of confidence, unrealistic expectations, and a sense of irrelevancy of requirements and conflict over having to meet them. Brandenberg (1974) cites almost entirely dispositional issues including uncertainness of the ability to achieve, resistance in spouse, family and friends, and guilt about and/or competition with the children. There are many more general problems if the financial resources are fewer and for those who are not married, and there is no evidence that a large network of supportive people is related to the number of problems (Magill and Cirksena, 1977).

Geisler and Thrush (1975) organize the problems differently. They say some problems are university related such as scheduling and age/sex discrimination; some are related to self and family such as finances, husband's attitude and helpfulness, and the expense and convenience of child care; and some are self-related only, with most being internal conflicts including time pressure, self-confidence, role definition and sense of direction.

Many problems are significantly worse for older women than for older men. These greater difficulties are time issues; admission procedures; fear of not being smart enough, of failing, or of dulled

memory; difficulty with children or spouse over the reentry; and guilt for spending money or pursuing their own goals (Lance, Lourie and Mayo, 1979). The longer the interruption, the significantly more difficulties were experienced. Dwinell (1981), in looking at problems of women students by five-year age groupings from "below 26" to "over 50," finds the demands on time and energy generally increase to age 40, drop until 50 and then increase. Financial concerns generally drop until after age 50. "Keeping up with the family" peaks as a problem during the later 30's while social life is increasingly a problem until the later 30's and then lessens. Financial concerns are less for the married and the widowed, but time for study is increasingly difficult with increasing age for the married and divorced.

Mardoyan, Alleman, and Cochran's review (1983) cites the problems of life disruption because of the time, attention, and finances diverted to college, the adjustments to being few and dependent in the younger world, the press of multiple commitments, the clash of the pragmatic experience of the world and the non-adaptibility of the university environment, and the lack of awareness of services available.

Suchinsky (1981), taking an entirely different tactic in describing problems, calls some "ostensibly environmentally derived" and others "developmentally based." In the first category is the family:

> "By and large the response of her family will tend to be inhibitory, either subtly or overtly. This will not infrequently occur despite overt expressions of support for her endeavor, and

> there will generally be stresses which will range from mild to severe" (p. 31).

This includes issues such as who stays home with a sick child or covers the absent sitter. Faculty and administrators may react to her age and marital or parental status or react more personally to a student who is their contemporary or their senior and whose problems may "...resonate with the kind of struggle the faculty person or administrator is experiencing in his own emotional life" and express their feelings "...in reactions, either positive or negative, which will be stronger and more inhibitory of effective education than those generally seen with younger students" (Suchinsky, p. 31). In the aging process she may lose some intuitive grasps or innovative brilliance but add insight and wisdom unavailable to the younger student. The institution may then need to deal with women's loss of capacity to grasp abstract concepts and loss of some memory acuity by developing faculty who have greater skills of making the abstract comprehensible and who have patience. Relative to ambivalent feelings toward younger classmates, inferiority "tinged with hostile admiration and envy" is possible as well as perhaps feeling amusement, shock or impatience with the younger students (Suchinsky, p. 32).

In the context of adult developmental theory, Suchinsky sees that the adaptable autonomous adult who adjusts to the environment in ways that are satisfying and productive does have hope. If this adaptation is not made, there is a problem. Returning students are in a growth period, and growth often comes with pain. They are more often depressed, have self-esteem problems, are anxious over ability, and

have more real physical problems as well as having a more mature perspective (Suchinsky, p. 41).

Perhaps this helps explain why barriers may be different to different people. To some, they're a definite stopping point. Others see the barriers only as a challenge to figure out how to go on anyway. To yet others they are a temporary setback or a permanent problem that does not stop them but either slows them or costs them extra energy while they continue toward their goal. Often it is the person's perception of an impenetrable barrier or minor stumbling block that determines its power to deter. Since barriers are most often cited in studies of current students, those students somehow have found their ways to circumvent or cope with the barriers enough to remain in school. So what keeps others out? And which of the barriers are only annoying and which are really true problems that may cause people to leave? When is a barrier a brick wall so one does not begin, or a mine field that blows up part way across or at least causes one to maintain anxiety as one threads one's way, and when is it simply an irritation? The attrition literature may help us understand at least a partial answer.

ATTRITION

Attrition information shows a rapid advance in the twenty years since a literature review found that only five studies had been done on college students and none on four-year college students (Verner and Davis, 1964). At that time the reviewers found persistence related to increased age, increased years of education, marital status for women, higher occupational status, higher income and higher active social

participation. Since then researchers find persisters are most satisfied with the college, non-academic dropouts who were passing are next, and academic failures are the least satisfied (Starr, Betz, and Menne, 1972). Persistence is not related to the amount of financial aid or to race (Selby, 1973) but is related to coming from towns of over 50,000 people (Cope, 1972). Traditional-age students more likely to complete a bachelor's degree in four years are Jewish, have higher grade point averages, are white, come from private high schools, plan to teach secondary school, and are on scholarships; but those supported heavily by family are dropout-prone (Astin, 1973). Baier (1974) agrees, adding that a low first quarter grade point average, low ACT scores and high school rank, and being black are most predictive of withdrawal.

Kowalski (1977) discovers a highly significant difference between dropouts and persisters on home environment factors including father's educational level, health or personal problems at home, satisfaction with the general attitude at school and with the faculty and academic advisor and residence halls, and on many personal, emotional and academic characteristics including plans about completing education, having good study habits and having good interest in their work and attendance at class and in general happiness with college. However, voluntary withdrawers among freshmen, who score higher on ability tests and have greater verbal ability than persisters and higher ability in general than failures, leave early because they want more independence;, and women voluntary withdrawers are less practical-minded than failures (Rossman and Kirk, 1970). If, in fact,

those younger students who value independence are more likely to leave, what does that say about the congeniality of the college atmosphere for autonomous older students?

The findings that dropouts and dropins at Lansing Community College have equal hours of work per week, more returnees are married than are dropouts, and returnees get higher grade point averages (Byrne, 1974) suggest it is the reaction rather than the stresses that determines educational behavior. But colleges have still lost two older students for each younger student for non-academic reasons (Kimmel, 1976). These losses may include the "stop-out" who goes one or more terms without enrolling but intends to continue soon (Mishler, Frederick, Hogan and Woody, 1982). The frequency of stopping out once enrolled seems to be greater between the ages of 25 and 35 than either side of that.

Much work has been done in attempts to predict who will drop out in the younger or general student populations. Among students in general persistence is best predicted by ability, followed by the level of educational plans or the goal commitment to college completion, and then by higher family factors and socioeconomic status with supportive democratic families whose parents encourage their children and expect them to be successful according to a major theoretically oriented literature review, (Tinto, 1975) and by religious background and religious preference (Astin, 1975).

When studying motivational levels, Marks (1967) learns that expectations of dropping out correlate with the level of aspiration, fear of failure, and parental attitudes and that those who expect to

drop out do so in significant percentages although there is no correlation between scholastic aptitude and expectation to drop out. He believes that those who are more likely to drop out are less committed to college and are more concerned with their parent's expectations than with their own.

In a major literature review in 1978, Pantages and Creedon see a stable ratio in research going back to 1913 showing approximately 37-40% graduate in four years, 50% graduate after continuous education, and 20% more graduate sometime, somewhere. They find more attrition at public state-supported universities than at private colleges and see similar attrition rates for older and usual-age enterers. They claim there is no significant difference by sex although several studies showed more women and others show more men among the dropouts, but that seems to depend on the type of institution. Women drop out more frequently in heavily male institutions, for example (Astin, 1964). Once a female drops out, she's less likely to re-enroll than a male (Astin, 1972).

Pantages and Creedon's (1978) summary of reasons for dropping out begins with academic concerns closely followed by financial problems. Next are motivation including uncertainty of goals and lack of studying; personal considerations including emotional problems, marriage and personal or family illness; dissatisfaction with college; military service; and getting a job. Females drop out more for personal reasons and males for curricular reasons. However, Pantages and Creedon emphasize that poor grades alone are not the cause of

attrition but are more likely to cause attrition when coupled with other non-intellectual factors.

In a six-year followup on women over 30, Reehling (1980) learns that persisters plan a higher level of education and work for a degree. She finds that discriminate function can predict persisters 96.2% of the time but is very poor at predicting dropouts. These dropouts are distinguished by their education being financed by others. In a study of older student withdrawers from Michigan State University, DelDin (1980) shows a slightly higher rate of women withdrawing than expected, and a higher proportion of divorced women and married men doing so. In looking at reasons to withdraw she explains they are academic, including needing a temporary break or having inadequate study skills or lack of interest; employment; finances and personal issues including time crunches; home responsibilities; personal problems and personal interests. Reimal (1976), in a study of re-entry women in nineteen community colleges, finds that persisters among reentry women are older, without children or previous college experiences, and with lower incomes. They are also more likely to have participated in a re-entry program.

Among single parent university students the most pervasive problem is having sole responsibility in decision making for children, coupled with social disapproval of their lives and financial difficulties (Hooper and March, 1980). "Many female single students who entered the university to solve financial problems find that the financial and emotional cost of student life is too great to be borne,

even in the short run" (Hooper and March, 1980, p. 142), and many fail because of isolation and lack of supports.

Astin (1972) suggests that the problem of research on attrition is its too heavy reliance on demographics and that moderator variables of motivation, attitudes or personality are needed. However, when Sharp and Chason (1978) look for moderator variables, they find that scales on the Minnesota Multiphasic Personality Inventory do not work. The problem of citing reasons for attrition, say Pantages and Creedon (1978), is that the problems withdrawers have are also problems for persisters and that while surveys may be simple, the reasons are complex and there is a danger of generalizing too much from one survey or one institution. They also believe that research looks at far too few predictors and recommend a shift from predicting attrition to preventing it.

The attrition literature may teach us that we may not be looking at the right questions. It may also be important to note the difference between those who drop out because they are failing and those who choose to withdraw but are not failing, because the second group may look more like the persisters than the failing dropouts. Dollar's (1985) examination of studies of attrition over time realizes that they have become more multivariate, including more combinations of academic and nonacademic measures. An important conclusion drawn by Kowalski (1977) is that academic problems and personal pressures will likely cause dropouts. He says since these issues can be identified, perhaps they should be. He believes that having a definite educational goal also makes a difference in persistence.

Lunneborg, Olch and DeWolf (1974) say, "Some subtle combination of personal questions in regard to expectations of dropping out or getting an advanced degree could provide a good noncognitive indicator of middle-aged school success" (p. 220). They suggest that one needs to look at expectations of continuing or dropping out as that may have as much validity as any other single predictor. Again, it seems clear that the moderation caused by one's self-regard and one's experience is probably as critical in the attrition event as is any external or concrete event.

The literature also raises the question of whether married, single or divorced persons handle things differently or are more likely to drop out or to react to the same events differently and whether those who deal confidently with life in general and who feel good about themselves are able to cope better with the problems that they may face.

It may be that those who drop out are those who do not cope with what Lenz and Hansen (1977) call the "traps and traumas" for mature students: lack of confidence, "that out-of-phase feeling," youth-age competition, home related guilt and the subsequent attempt to be Supermom, school related guilt, unrealistic expectations, the drag of the past and the painful memories of previous education and the adjustment to carrying various roles simultaneously. "Adults going back to school experience change, and most people deal ambivalently with change. It is bittersweet, bringing both excitement and apprehension" (p. 154).

COUNSELING NEEDS

Perhaps as colleges become better able to provide for some of the needs of older students, the attrition rate will go down. The provisions necessary for removing many of the institutional barriers are relatively self-evident in the descriptions of the barriers. And colleges can alleviate at least part of the situational barriers if they so choose.

But if students do have as many dispositional problems as the literature suggests, it may be that colleges will need to become more attuned to meeting the psychological needs of older students. The literature suggests that what is needed to maintain them is counseling regarding aptitude, emotional problems, and vocations (Sensor, 1964) or counseling to understand "the extent to which they prevent their own successes" and how much family resistance is real and how much is projected as an excuse; to analyze and understand the reactions of spouse and family; and to explore guilt feelings and self-gratification versus sacrifice for others (Brandenberg, 1964). Many writers recommend supports such as a "Guide for Returnees" brochure (Rawlins, 1979) or dealing with such psychological issues as the need for identity, low confidence and self-esteem, and the stress of adding a role (Greenfieg and Goldberg, 1984).

Porter (1970) believes counseling should be aimed toward helping students in dealing with a lack of confidence, adjusting to the press of time, choosing appropriate long-range goals, budgeting time, dealing with the pressure of family life, blending real world experience into the ivory tower framework, dealing with the tolerance

of education by those at work, dealing with the bad memories of early educational experience, and gaining flexibility in order to avoid discouragement. Erickson (1970) suggests that counselors of adults need to deal with fears of: inadequacy, examinations, inability to study and read rapidly, class discussion, being out of date, competition from adolescents, and failure and also need to deal with individual reactions to stress, the search for identity and role problems, personal adjustment, social problems and other issues.

Tittle and Denker (1977) in their literature review see the main problems for returning women as being:

> 1. "Stereotyped attitudes (held by counselors and reentry women) about psychological adjustment as students, as wives/mothers, as employees, and as decision makers.
> 2. Management of home and academic responsibilities
> 3. Asserting the rights of the woman, as an individual, in home, social, work and academic settings." (p. 544)

They further assert that while women need help in handling these problems, sex and age bias of counselors has been documented and must be attended to in the university.

Kelman and Staley (1974) add social skills training to a list of what women need to cope in college. And in addition to these forms of assistance, others suggest the colleges provide for: preschool nurseries and a club for married women (Sensor, 1964), finding better ways of selecting for admission and lifting financial aid restrictions (Brandenberg, 1974), having women's centers for reentry information and training faculty in listening to adult women's concerns (Folland, Pickett and Hoeflin, 1974), waiving prerequisites for suitable experience, encouraging "testing-out" for employment/experiential learning, keeping university services open later and at noon (Rawlins,

1974), offering child care and peer support groups (Greenfieg and Goldberg, 1984) or a place to stay overnight in bad weather, and counseling and workshops on assertiveness, values clarification, relaxation and study skills (Rawlins and Davies, 1981).

RATIONALE AND SCOPE OF THE STUDY

Problems inherent in previous research have been that often women have not been looked at separately from men, the older student has not been separated from the traditional age student and attrition study has focused heavily on academic achievement on the assumption that achievement is related to persistence which doesn't explain the attrition of the more able student. Either the dropout or the persister is investigated but rarely are both, which leaves no control group for assumption of results. Focus is frequently narrow, on only one or two reasons for attrition or only on reasons for leaving or reasons for return or barriers or other singular items. The dropout is rarely defined in ways that exclude or account for the stopout or the transfer or those who have gained all they want from college and therefore we don't know whether they are temporary or permanent dropouts (Pentages and Creedon, 1978). The problem is that we want direct reasons for poor grades when they may be only consequences of some other perhaps less direct event. Furthermore, research on motivation and psychological factors has been hampered by a lack of measures, and researchers have therefore often chosen to stay only with demographic variables or with simple prechosen lists of external reasons rather than investigating those which pertain to one's psychological health and coping ability (Cross, 1982).

> "Sociodemographic variables such as age, sex, income and schooling appear to play a relatively modest role in influencing the educational participation and persistence behavior of American adults....Variables such as age and schooling...are of relatively modest importance if one wished to explain and predict participation and persistence in adult education. Future research needs to employ more sophisticated conceptions of the participation process that include personal and situational variables (e.g. attitudes toward education, life change events such as marriage, job loss and retirement...." (Anderson and Darkenwald, 1977, pp. 5-6).

Maudel, Butcher and Maurer (1974) believe we need to pay attention specifically to the difference between persisters, transfers and dropouts because personality variables more strongly predict transfer than do academic variables but academic variables predict group membership well, especially during the most recent term. Therefore, they suggest, researchers should use the personality variables which can be collected at the beginning of college since academic variables are unavailable until later.

Roehl and Okun (1984) discover higher depression rates than expected among first semester returnees and wonder whether that was because they were having trouble with the experience or if they really had more negative life events than other women their age. They suggest looking at life satisfaction, GPA's and persistence in addition to depression.

Campbell, Converse and Rodgers (1976) find factors that relate to mental health in middle life are that married women are more satisfied than single, but single women have increased emotional health. While men and women both describe their lives as equally satisfied, mental health surveys find women less mentally healthy than men although the

married of both sexes, with or without children, experience life more satisfying than do single, widowed and divorced persons.

In a study of coping styles for stressful situations of graduate students, Kjerulff and Wiggin (1976) learn that the students progressing well respond to all stressful situations with anxiety but without blame and then mobilize themselves to cope with the situations. The students considered less competent, both academically and interpersonally, are extremely anxious when confronted with academic problems, not anxious at all in stressful situations where there is no clear source of blame, highly self-punitive in academic failure situations and blaming in interpersonal situations.

After studying the literature and meeting with many older female students, it seems appropriate to look at the sociodemographic and educational variables such as age, parental and marital status, amount of finances available and how adequate their finances are perceived to be, number of children, spouses's educational level, years of education achieved before, and whether people were working while going to school as well as reasons to withdraw previously and to return now. However, it seems even more important to look at some of the psychological variables to see whether those who feel life is satisfactory, who find they are primarily happy, who cope well with crises, who expect to stay in school and who have an internal locus of control are more likely to stay in school and to do better in school. It would seem that the psychological variables are more important and will help define which people will find the experience too much and will leave while those who are more healthy psychologically may

persist despite the fact that they may have as many problems or pressures as those who drop out. It will also be interesting to look at the triggers for return and at whether those who are handling major life change either before or after entering college are able to cope with the change adequately or whether that is a primary reason for failure to continue.

THEORY

What then are the underlying components for those who handle the transitions well, who cope with stressful situations well, and who manage to balance the several roles adequately while attempting to be a student at an older stage of life? These questions seem to be best answered by looking at some of the theory of adult development, of adult behavior and of adult change. Neugarten's (1968) comment on the state of knowledge about human adulthood that there is both a paucity of data and, more importantly, a lack of a useful theory leaves us still floundering. Unfortunately, most of the research on adult development has been done on men, and even some of that research has been claimed to be true for all adults. Despite even the popular literature which describes stages of life, knowledge of what does happen in adult women is thin.

Erikson (1959) describes adult development as proceeding linearly through a series of stages with certain tasks for the resolution of each stage. He believes that women often cannot finish their task of developing personal identity until child-bearing responsibilities have decreased. His resolution for this suggests that women's identity crises appear after a choice of mate. This seems to imply that not

marrying may mean a woman can never establish her own identity. Levinson's model (1978) reflecting male experience focuses on chronological age rather than experience as the key variable. However women do not appear to have a sequential mode which they follow through appropriate ages. A major flaw of these theories is their lack of attention to the varying role patterns for women who show varying combinations of career, marriage, children and the degree of commitment to each. In their different attempt to understand adult female develoment, Barnett and Baruch (1978) suggest that locus of control and attributions are areas that may warrant investigation.

Theory building within the field of adult education has been difficult because of the marketplace orientation of adult educators, the fact that the field of adult education has produced few true scholars, and the multidisciplinary nature of the field (Cross, 1981). One can postulate that those persons who return to college to further their education have already filled the lower three levels (the more basic needs) of Maslow's (1970) hierarchy adequately. Education can be a method of filling the needs for esteem from one's self (achievement, competence, independence) and esteem from others (recognition, status, pay, jobs and respect). The paradox is that while education can be a route to achieving esteem, adequate self-esteem is needed to begin the pursuit of education. Therefore Maslow's theory is only partially helpful.

One theory with some validity is the congruence model of Boshier (1973) in New Zealand, continuing in a vein begun by Pervin and Rubin (1967). He sees that the motivation for learning is a function of the

interaction between internal psychological factors and external environmental variables. His model claims the older participant and the dropout can both be understood by looking at the magnitude of the discrepancy between the person's self-concept and key aspects (principally persons) in the educational environment. He claims the number of incongruencies are additive with the greater sum meaning the greater likelihood of nonparticipation or dropping out. The theory's examination of internal and psychological determinants of participation and persistence seems to be a good beginning. But his model explains neither why some students remain to get their education despite the incongruencies nor what role is played by the lives of the students external to the learning situation.

A further paradox is that to return to school and to achieve may be precisely what causes problems elsewhere in a woman's life. Balance theory as proposed by Newcomb (1961) asserts that a change in one part of a social system or a relationship between persons which puts the relationship into imbalance results in a state of tension that leads people to attempt to reduce the strain and to restore the balance. Thus reentering college can be considered an imbalancing of the woman's entire life system. If the rest of the system can adapt to the addition of education to a previously balanced system, there will be fewer conflicting demands of the woman and more tolerance and acceptance resulting in a milieu in which she can continue her education. If this imbalance is seen as threatening to others, the rest of the system may begin to pull away from her or to reject her

and she may then be in even more distress than that which is caused by adding the role of student to the rest of her full life.

> "Predictably, it seems that if the reentry woman begins to achieve success on the campus, grows in self-confidence and self-esteem, broadens her perceptions and values, and becomes more accepting of others, those persons closest and most important to her become less accepting of her, and they react negatively or they withdraw" (Roach, 1976, p. 87).

If the family can accept and applaud her increased feelings of worth, the system remains in balance. If they are threated by this, the imbalance of the system can cause her to withdraw or to make major adjustments in the rest of her life. It is precisely this possible threat to the preexisting closed system that prevents many women from attempting a return to college, and it is supposed that imbalanced systems will cause many women to drop out.

Balance theory combined with Maslow's hierarchy of self-actualization seem to be a beginning but incomplete model of determining persistence in education. Bandura (1977, 1982) suggests a theory of self-efficacy in which a person's self-perception of the ability to cope and deal with a given situation controls the probability of adaptive coping responses being initiated and maintained during stressful circumstances. Although self-efficacy is becoming a better known subject, it appears to need examination in the light of a specific situation rather than as a generic description (Brown and Heath, 1985). These writers believe people who deal well with a life event can appropriately answer the questions, "Why did it happen? What was my role in it? What do I do now?" (p. 462). Those who are more prepared for an event will be more appropriate in their attribution of cause, but deficits of self-esteem will come about if

the attribution is experienced as being internal. Perception of control will correlate with depression and this perception will be the moderator of their attribution rather than depression being the specific and direct result of the attribution itself.

Thus we have some of the linkages of theory which can give us direction. Underlying these linkages is the premise that good psychological health generally enables much adaptive behavior. It is hypothesized in this study that those who have good psychological adjustment will be those more likely to persist until graduation and those who earn higher grade point averages. It is anticipated that those with good psychological adjustment will cope with problems, will better manage time and multiple roles, will have appropriate goals, and will be instrumentally appropriate in achieving their goals and fulfilling their needs.

Because it is important according to self-efficacy theory to couch expressions of self-efficacy within the setting and time period of interest, this investigation looks at specific components of psychological adjustment as they effect a woman in the student role or to be effected by a woman in the student role. Rather than taking one particular and generic measure of psychological health, several specific facets of adjustment are used.

COMPONENTS OF PSYCHOLOGICAL ADJUSTMENT

LIFE SATISFACTION AND HAPPINESS

In an attempt to look at the breadth of psychological adjustment, several issues need to be examined. The quality of life, as described in some national studies, examines both life satisfaction in general,

which is conceived to be a cognitive measure, and happiness, which is considered an affective measure (Campbell, et.al, 1976). The literature repeatedly finds 5-15% of people consider themselves to be not too happy (Bradburn, 1969; Robinson and Shaver, 1973; Black and Hill, 1984). When changes occur over time, the shift is likely to be from very happy or very satisfied to mostly happy or mostly satisfied. Increased satisfaction has been found by some to be correlated with socioeconomic status (Bradburn, 1969; Edwards and Klemmack, 1973) but not by others (Lowenthal, Thurver and Chiriboga, 1975).

Sands and Richardson (1984) find female returning students are very satisfied with their personal lives and that academic but not demographic variables contributed to their satisfaction with school. The younger of their over-30's are more depressed and stressed than the older women. Kirk and Dorfman (1983) discover that the strongest predictor of satisfaction as a reentry woman student over 34 is the helpful attitudes of professors. Many studies show married persons are the most happy and widowed and divorced persons are the least happy. However, Kaplan says this does not hold for married women (1986).

Assessments of both happiness and satisfaction have relatively stable test-retest reliability. One of many such studies is Sears and Barbee's (1977) followup on Terman's gifted women fifty years after the initial study. While saying "one-shot" measures of satisfaction often don't show conventional reliability, they claim the satisfaction reports remain quite consistent over a recent ten-year period. Robinson and Shaver (1973) assert, "One of the most impressive

features of (these) questions...is the stable test-retest reliabilities they exhibit" (p. 17). Andrews and Crandall (1976) compare several measures and conclude that perceptions of well-being can be measured with some validity. Several measures of life-as-a-whole showed validities of single-item scales of 0.70 to 0.79. They suggest this validity can be raised by using several measures together.

SELF-ESTEEM

Another important component to psychological adjustment appears to be self-esteem. This is variously described as "...liking and respect for oneself which has some realistic basis" with self-acceptance being necessary but not sufficient for self-esteem (Robinson and Shaver, 1973, p.45), a set of attitudes a person holds about him- or her-self (Martin and Coley, 1984) or simply how a person feels about oneself which is consided to be a component of well-being and whose integral parts include locus of control (Campbell, et.al., 1976).

The return to school itself increases women's self-esteem (Astin, 1976c), while among married womem, self-esteem is increased in women who percieve themselves as supported and respected by their family and peers and who are therefore confident of their ability to handle academic tasks (Farmer and Fyans, 1983). Self-esteem in returning women increases with increasing semesters of schooling, although the more guilty the woman, the higher the husband's support (Hooper, 1979).

LOCUS OF CONTROL

Locus of control, a further dimension of psychological adjustment, is defined as "...the extent to which persons perceive contingency relationships between their actions and their outcomes" (Robinson and Shaver, 1973, p. 169) or the extent to which a person perceives events as being a consequence of his or her own behavior and therefore potentially under personal control (Lefcourt, (1982). Lefcourt believes persons must come to perceive themselves as determiners of their own fate in order to live comfortably with themselves. Those who believe that some control rests with them are considered internals (versus externals who see their lives being controlled by outside persons and/or circumstances).

Burgaighis, Schumm, Bollman and Jurich (1983), using a one-item question as well as a scale for locus of control, find the one item correlates well with the scale. Their internals show increased marital satisfaction. In a wide age range of undergraduates, locus of control correlates with intelligence, self-esteem, self-concept and age (Martin and Coley, 1984). But for women over thirty, locus of control in the direction of having external social validation is the most important component of a sense of competency (Feldman, 1980). This measure highly correlates with intellectual ability and with measures of general mental health (Powell and Vega, 1972). A group of traditional role women in graduate school see reinforcement from family and friends as necessary and are rated as externals while nontraditional role women feel they have more personal control of their lives (Brown, 1983).

A number of studies examining the correlation of locus of control with academic achievement find such a correlation (Foster and Gade, 1973; Hudesman, Avramides and Loveday, 1985; Otten, 1977; Powell, 1971; Traub, 1982). All of these studies either are on both sexes together, with or without separate reporting, or on males. In a mixed-sex college sample, Prociuk and Breen (1973) do not find a correlation with academic success while Traub's findings hold for women separately but not for men alone, the direct opposite of Nowicki's (1973) findings on younger subjects by sex. With males, Otten (1977) goes so far as to say that locus of control better predicts graduation than do ability tests. In a predominantly female British college sample, Brewin and Shapiro (1984) do find internal responsibility for academic performance while Prociuk and Breen (1977) find internals are more accurate in predicting their levels of academic achievement. This then does not explain why Muskat (1978a), who looks at interrupters versus persisters among college freshmen, finds no difference in locus of control but does find that the internals had previously increased GPA's. She also interestingly discovers that women are more sure they will do well and graduate than are men.

This leaves a large area of unsureness relative to locus of control. Very little has been done with women alone on locus of control. There is some suspicion that women are more likely to have an external locus of control than men and that those who have an internal locus find it less societally valued. However, women who turn to education are not doing the necessarily socially correct

thing. They therefore may be more likely to have an internal locus of control which enables them to return to school at.

SUMMARY

Taken together, the subjects of self-efficacy, life satisfaction, happiness, self-esteem and locus of control should give a relatively good combined indicator of psychological adjustment. It is the hypothesis of this study that better psychological adjustment will differentiate those who persist to graduation from those who do not. It is also predicted that these separate measures of psychological adjustment will be intercorrelated, and that it will be possible to use one or two of the separate items to stand for the whole group of items predicting persistance versus withdrawal.

CHAPTER 3

DESIGN AND METHODOLOGY

SUBJECTS

Subjects in this study are women who registered for undergraduate credit in fall term, 1984, at Michigan State University who have birthdates before September 15, 1959. These women, therefore, are those who were 25 and older at the beginning of fall term, 1984. They fall into three distinct major groups and two minor groups. Major groups include:

1. Students who graduated since September, 1984 (some of whom are current graduate students).
2. Students who dropped out since September, 1984. Dropouts were expected to differ in that those who achieved all they wanted in school were assumed to be more like the persisters than like the dropouts who didn't achieve their goals. These goal-achievers were to be analyzed separately. However, since only three dropouts fit this category, they were too few for analysis. Therefore, they are summed with the totals of all students but are excluded from analysis when persisters are compared to dropouts.
3. Current students still enrolled as undergraduates after spring term, 1986.

Minor groups include:

4. Transferees who left Michigan State University and enrolled elsewhere.

5. "Stopouts" who were enrolled winter term, 1986, did not enroll spring term, 1986, for whatever reason, but plan to reenroll fall term, 1986.

It was assumed that transfers would look more like persisters than like dropouts since they do continue their education somewhere. And those who "stop-out" briefly to cope with a particular life situation and very quickly pick up the academic threads again were assumed to differ from other dropouts. Because of their small numbers, these assumptions could not be tested for the minor groups. These minor groups were included in all the general frequency counts and are described as part of the population but were too few to be analyzed separately in most statistics.

SAMPLE SIZE

Two assumptions were made before beginning to survey this population. One is that, as older students, they are more likely to be part-time students who would take a longer time than usual to graduate. The second is that they are more likely to have had some undergraduate education previous to this most recent enrollment, either recently in a community college or a four year institution or previously in the period immediately after high school. According to this second assumption, the population might be expected to be somewhat farther along in their undergraduate education than the average population of students.

In deciding on an appropriate sample size to allow an adequate number of subjects within the target groups of graduates and withdrawers, it was assumed that approximately fifty per cent of the

students in the population would be still currently enrolled at the time of the survey, twenty percent would have graduated, and thirty per cent would have left Michigan State University. These assumptions were made in part by having consulted with staff members in the Student Affairs office, the Withdrawals office, the Registrar's office, Lifelong Education, and Adult Services and other departments on campus where people make educated guesses about this population.

Because it was expected that this design would yield criterion groups of graduates and withdrawers of unequal size, an important requirement of sample size was that the smaller of these groups contain at least thirty subjects to satisfy the assumption of normality of the underlying distribution despite unequal group sizes.

SUBJECT IDENTIFICATION AND CONTACT

The registrar's office of Michigan State University identified the subjects. The registrar's computer generated three sets of mailing labels for a random sample of 450 of the 1247 undergraduate women who were born before September 15, 1959, from the fall term, 1984, university registration records. Because of the method of record-keeping, these labels used the addresses which were current in September, 1984, without access to updated addresses. The Division of Women's Programs of the Department of Human Relations attached a set of these mailing labels to previously prepared envelopes which contained a cover letter, the questionnaire, and a stamped, preaddressed return envelope and mailed these envelopes on May 30, 1986. Thus, the subjects remained anonymous to the researcher until the subjects identified themselves.

One week after the first mailing, a post card expressing thanks for participation was sent by the same process to all who received the first letter. A followup mailing including a second letter, another copy of the questionnaire and another stamped preaddressed envelope was mailed in the same manner to all who did not respond or who had responded anonymously two weeks after the initial mailing. This meant anonymous responders received all three mailings. Because few dropouts had responded within twelve days of the original mailing, the second envelope was personalized by writing a request to open and reply soon in a bright colored ink on the envelope. It was hoped that those who may have thrown the first mailing away unopened would be curious enough because of a handwritten note on the envelope to open the letter. Another brief paragraph was also then handwritten in bright ink across the top of the letter saying more responses were needed in all categories and especially from those who had left Michigan State University.

Due to not receiving responses from the thirty dropouts deemed necessary for assuming normality of the distribution and for replicated discriminate analysis from the first sample, a second complete set of mailings was completed during July, 1986, by an identical process including the handwritten notes, to 202 more women from the original population.

Of the original sample of 450 women requested from the registrar, 426 sets of labels were actually provided. That office explained that the remaining 24 would be those persons who requested confidential status, who did not give a usable address, or whose records were in

some such way unavailable after they had been identified as being in the appropriate pool. From the pool of 426 subjects surveyed, letters to 23 were undeliverable leaving 403 deliverable surveys. The 255 returns yield a 63.3% return rate from the first sample. Of these, two were under 25 years old at the time of the survey and had been erroneously sampled. They are not included in the data set.

Of the second sample of 202 women requested from the registrar, 202 sets of labels were actually provided. Questions of why the first sample decreased from the requested number and the second sample did not decrease were never answered by the registrar's office. From the pool of 202 subjects surveyed, letters to 21 were undeliverable. This left 181 deliverable surveys. The 109 returns yield a 60.2% return rate from the second sample.

Taken together, the 584 deliverable surveys yield 363 responses or an overall response rate of 62.2%. Of these, 361 responses are included in the data set. It is interesting to note that in both samples, the majority of those who left Michigan State University by dropping out, stopping out or transferring only responded after receiving the full set of the three-wave mailings although a majority of the total replies from each sample were received within less than two weeks from the original mailing.

PROCEDURES TO PROVIDE SUBJECT IDENTIFICATION AND CONFIDENTIALITY

Subjects were asked to provide names and contact information so that followup mailings could be sent only to nonresponders or to unidentified responders and to make possible a future followup survey.

A future longitudinal study could ask the present students whether they graduated or left the university and could examine whether they did indeed fall into the categories which this research would postulate as probable.

Measures taken to assure anonymity of data and to protect the confidentiality of subjects included assigning a number consecutively to each person's materials upon arrival. Approximately 90% of respondents provided names and addresses on a separate page from survey data which were immediately separated from surveys. Any reports made from this information will be without identifying data, including but not limited to this research report. The surveys include a personal code number which subjects would be able to reproduce in the future. This code will allow one-to-one comparison of future survey information with that on the present survey even for those completing the survey who do not give their names. This personal code number consists of six digits representing the month, day and year of their birth plus four more digits representing the month and day of their mother's birth.

METHOD OF DATA GATHERING

A packet originally mailed to all subjects contained:

1. A letter explaining the purpose of the study, why their input is important, how issues of confidentiality will be handled, that their participation is voluntary, and how to raise questions if they desire;

2. A survey instrument;

3. A form for the name, address, telephone number and student number;

4. A stamped, self-addressed envelope (to the Division of Women's Programs using a format not currently used there for any other purpose to identify survey responses).

This research was conducted in a mailed survey format for several reasons. The literature suggests that this population is extremely busy, and that too many demands on time is one of the major (if not the primary) problems older women students face. A written survey instrument which can be completed at their convenience offers a method to gather a large amount of information with the least amount of intrusion into their busy schedules. Furthermore, the options for response are visible at one time, and respondents can most efficiently decide on the best response. They are the most knowledgeable persons to make their own choices in cases of unsure answers.

A checklist format is used to gain specific information quickly and with the least amount of effort for the subjects while gaining the greatest amount of information. It is assumed that subjects are more likely to respond to something which will take only a brief time and that this consideration will increase the response rate. Since access to the subject population is restricted by the university prior to each subject giving consent to participate (because they are being identified by age which is deemed to be a confidential piece of information), each subject must, at some point, be asked whether she is willing to participate in this research. It made the most sense for them to have the research instrument at the time of making this

decision and to be asked to respond only once, giving the requested information at that time, so we do not have the added attrition of those who agree to be surveyed but then do not complete the survey.

Dillman's book on surveys (1978) uses social exchange theory to underline some of these decisions. He says survey results are maximized by minimizing the costs of responding, maximizing the rewards, and establishing trust. He sees mailed surveys as having the least social desirability bias of all types of information gathering.

Dillman's formula for ordering the survey items, for using contrasting upper and lower case letters, for controlling survey length, for pretesting (piloting) and for the design and timing of mailing waves were primary guides in the design and implementation of this research.

INSTRUMENTATION

This survey elicits information on both factual/objective indicators and a set of subjective indicators which reveal how these women evaluate their own lives. This is in accordance with indications that information on the quality of life needs to be both objective and subjective (Gitter and Mostofsky, 1974).

OBJECTIVE SELF-ASSESSMENT

The survey first establishes the respondent's catagory as graduate, withdrawer, transfer or current student. Those who are out of school are asked their future educational plans to differentiate stopouts from dropouts. Stopouts are identified by the date when they last attended Michigan State University compared to when they intend to return to Michigan State University.

Sociodemographic variables (age, marital status, children, income, employment while a student) and education-specific concrete variables (part- or full-time student, years of education completed prior to last entry to college, number of times of college entry, current student status) are included. Married students are asked the level of their husbands' education since some literature leads one to expect higher attrition due to less spousal support for her education when a woman is working toward a higher educational level than her husband possesses.

SUBJECTIVE SELF-ASSESSMENT

The subjects' self-assessment of several factors is questioned. These factors include the perceived adequacy of income since different people see different amounts of income as adequate, an assessment as to whether money is a problem in student life, reasons for having not completed college at a traditional age, reasons for return to education, personal changes or crises which contributed to their return and personal changes or crises which occurred after their return and an assessment of the severity of these, reasons for accomplished or possible future withdrawal from the university, and expectation of completing a degree.

The subjective questions pertaining to income are included because an amount of income which one woman may see as adequate could be a cause of withdrawal for another woman. It is also interesting to see what income ranges are perceived as adequate or inadequate.

The reasons for original non-completion, reasons for current return and reasons for withdrawal are heavily researched questions.

Most of these items are taken from previous studies with the only item not previously found being the reason for leaving because a person "Achieved all I wanted from school." This item is included to separate out those who leave because they have accomplished their goals, even though they may not have graduated, although surprisingly few marked this option.

The questions on personal change or crisis are based on frequently published observations that many older women return because of life changes or crises or that the change or return to school initiates other life changes or crises. However, since some women cope and persist and others do not, these items are constructed (with a partial base in Aslanian and Brickell, 1980, and in part from personal reports) to assess both the types of events and the severity of their effect (DSM 111, 1980).

Since the literature suggests that a single question assessing one's expectation of completing a degree will be one of the most important predictors of graduation, such a question is included.

SELF-ESTEEM INSTRUMENT

The final two categories of questions pertain to psychological adjustment factors. In one category, two instruments are used intact from the literature. At this time the literature is relatively weak on measures of self-esteem or self-concept although Campbell, Converse and Rodgers (1976) see self-esteem as being "relatively fixed early in life and thus...to be causative of...satisfaction" (p. 59). Three measures merited consideration: Rosenberg's Self-Esteem Scale (1965),

the Tennessee Self-Concept Scale (Fitts, 1965) and Coopersmith's Self-Esteem Inventory (1967).

The Tennessee Scale has the advantages of several hundred usages, several subscales, and (varying according to the author) possible good validity and reliability. It has two major deficits. It consists of one hundred items which taken alone seemed to make it too bulky, given the concern for brevity in this instrument. And the very fact that it generates several subscales underlines the fact that it is much more complex than needed or desired as well as being repetitive. Also, as a separate published scale, it is prohibitively costly, especially for repeated mailings.

Rosenberg's Self-Esteem Scale (1965) consists of ten items, each of which can have two levels of agreement and two levels of disagreement. Rosenberg's and Coopersmith's scales appear to have about equal validity (Demo, 1985) and reliability and about equal support and detraction in the literature. Both have been frequently used in research. Coopersmith's scale has a drawback of being rather highly correlated with social desirability (Ryden, 1978). One study comparing several measures of self-esteem indicated about equal usefulness but said the older subjects preferred the Rosenberg instrument over four others, in part for its brevity. Therefore, the final choice between approximately equal instruments was made of the basis of this published preference and of length, the Coopersmith being a 58 item scale and the Rosenberg being only ten items. The Rosenberg scale is reputed to have a reproducibility coefficient of

.92 and scalability of .72, a rather high level of reliability and construct validity for a brief scale (Kernaleguen and Conrad, 1980).

LOCUS OF CONTROL INSTRUMENT

The locus of control instruments have somewhat the same problem as self-esteem instruments. In both cases an ideal instrument has not yet been substantiated, probably in part because of the complex nature of the construct being tapped.

The original and most popular instrument is Rotter's (1966). However, for all its popularity and usage, it is heavily and rather uniformly criticized for such weaknesses as low point-biserial item total-score correlations, inclusion of non-scored filler items, heavy reliance on items pertaining to control in the political realm, multidimensional aspects particularly in the external portions of what is claimed to be a unidimensional scale, and variation in referents between beliefs about people in general and beliefs about oneself. The forced-choice format has both the problem that its items too often are not parallel and the problem that the format makes it more susceptible to responses deemed to be socially more desirable.

The problem then remains of selecting a better instrument. Several have been devised over the years with four or five getting some repeated use. Although few of the other measures have received the scrutiny of Rotter's instrument, two were worth consideration. Levenson's (1974) scale has frequent use and is probably the best of those with much attendant research. It avoids the forced choice format but falls into the trap of obvious response bias since all questions are scored in one direction. This scale also has the more

prominent difficulty of not having factors which account for a very large amount of the variance.

The scale used here is quite new, appears to have very good face validity, but is too new to have had much use in research. Duttweiler (1984) developed an instrument focusing on aspects of personal choice, belief in one's self and independent action. She used a four-phase system of instrument development including defining the network involved in locus of control, pretesting in several educational settings (junior college, continuing education, college and university students), field testing, and supplemental administration with Mirels' Factor 1 (Mirels, 1970) of Rotter's scale to look for replicability and convergent validity. She finds small but significant differences between subject categories in that a slight increase in the Internal Control index is found to correlate with increasing age, educational level and socio-economic level during her larger field administration. However, Duttweiler considers that difference to be small and to have appeared only due to large sample size.

The coefficient alpha estimates of reliability for the two primary testings were .84 and .85. Discriminate analysis shows one factor, "self-confidence," accounts for 68.7% of the variance. A second factor labeled "autonomous behavior" accounts for 31.3% of the variance. Convergent validity is claimed due to significant correlation with a portion of Rotter's scale. Further research is in progress at several sites using this scale, but no further studies have yet been published (Duttweiler, 1986).

SINGLE ITEM ASSESSMENTS OF PSYCHOLOGICAL ADJUSTMENT

The final category of questions also pertains to psychological adjustment but consists of several single items rather than complete scales:

A single-item asessment of locus of control is used, testing whether one item can assess this aspect nearly as well as an entire battery of items and whether it has criterion validity. (Bailey, 1978). One previous study using both a battery and a one-item assessment showed a significant moderate correlation between them (Bugaighis, et. al., 1983).

Since "happiness" seems to assess an emotional state while "satistaction" assesses a more cognitive state (Campbell, et. al., 1976), both are studied here. Life satisfaction while in school (and afterwards for those no longer in school) and happiness during school are each assessed by an item adapted from a national survey of the quality of American life and originally developed by Bradburn (1969). These two topics have a correlation of .50 in Campbell's study, although they find satisfaction to be much lower among single than married adults. These two measures together appear to be an appropriate expression of global or overall well-being (McKennell and Andrews, 1983).

One item assesses a self-perception of coping with crisis. This item is included because it is considered that equal crises have different meaning for different women and that an assessment of crises alone is imcomplete. Further, one's self evaluation of her ability to cope may be correlated with other measures of adjustment and may

account for why some women withdraw because of changes or crises assessed previously while other women continue in school while having the same experience. This assessment is one method of assessing self-efficacy.

Another measure of self-efficacy is a general question asking how well the women are doing in getting the things they want out of life.

Two items asked only of those who withdrew assess how good they feel about their decision to leave and how much they wish they had remained in college.

In his complex statistical analysis of surveys used nationally which include several of the single items in this survey, Andrews (1984) finds validity is improved by having four or more response categories, allowing comparative rather than absolute answers, briefer battery length for embedded batteries, and omitting topical headings. He found average variances for questions such as those used here of happiness and satisfaction to average .81. Using his formula for estimating the validity of single items, those used here assessing psychological adjustment would have validities in the high .80's to the low .90's.

GRADE POINT AVERAGES

The survey asks for the most recent cumulative Grade Point Average (GPA) and the most recent one-term GPA. It also asks for as accurate an assessment as the subjects can make of the GPA attained before the last entry to college. Obtaining GPA's allows testing of the hypothesis that those with higher GPA's are more likely to persist and to be better adjusted. The recent GPA, the cumulative GPA (the

usual measure in the literature) and the entering GPA are all studied since a woman's GPA may have changed markedly after a return to education later in life from what she had accumulated earlier. The recent one-term GPA is thought to be a good indicator of what to expect next in a woman's academic career.

RESPONSES TO OPEN-ENDED QUESTION: FURTHER TOPICS SUGGESTED BY RESPONDENTS

Because the checklist format may miss interesting and useful information which may not fit neatly into analyzable configurations or which may not have been considered at the time of instrument construction, a space is provided for unstructured response to the question, "What else do you think is important to know in a study of older women who do or do not complete an undergraduate degree?" Three lines are provided with an invitation to use the back if desired. More than two-thirds of the women have more to say, many of them using much more space than the lines provided.

Some of them use this opportunity to tell of their own experience at Michigan State University. Others see the question as a request to indicate areas that the questionnaire could have covered but omitted. A smaller minority both suggests further questions and tells of their own experiences.

Because of the volume of the responses and apparent grouping of some topics, two raters read the responses on two separate occasions. First they categorized the responses and agreed on a set of categories. Then they classified the responses by the agreed-upon categories.

Although it is likely that a woman would not mention a topic unless she had found it to be important to her, a conservative approach is taken here: Responses are reported in two groups. The first group of responses is a summary of topics mentioned which are expressed in the first person as a stated comment on experience of the respondent. The second group of responses is a summary of topics which the respondents suggest should be raised as questions in such a study as this. It is noteworthy that these two categories primarily are the same. A summary is then provided of the total number of different women who refer to each topic, making comments and/or suggesting questions. This summary may give a better indication of the relative importance of each topic.

ANALYSIS OF DATA

The population is first described using frequencies. The program Crosstabs is then used in the Statistical Package for the Social Sciences (SPSS) to find chi squares. Chi squares are used to answer the question of whether there are equal proportions between groups on several nominal or categorical variables. This statistic informs as to whether two classification variables (which may occupy several cells each) are statistically independent or are significantly related. Since the level of significance is set a priori at p=.05, all results reported as being significant are at least at the .05 level. The chi square test merely tells whether there is an association but does not measure the strength of the association. Further tests (which vary depending upon whether the data is nominal,

ordinal or interval) are used to test the strength or weakness of the associations which are found to be significant.

T-tests are used to test the differences between means of two variables. They are of particular use in understanding ordered or interval data. Primarily, t-tests are used to compare the two criterion groups of those who persisted to graduation (persisters) and those who dropped out without having achieved their goal (dropouts) on several variables although some other means are also compared. Many t-tests are two-tailed, meaning that while a difference is expected between means, the direction is not predictable a priori. The t-tests which are one-tailed are those for which the working hypotheses of the study suggest the direction expected.

Comparisons are made between the criterion groups and the items or scales of psychological adjustment to see if these measures do actually discriminate between groups. Other tests examine relationships between expectations of graduating and the criterion groups, between the sociodemographic variables and the criterion groups, between the education-specific variables and the criterion groups, between subjective questions about income and criterion groups, between crises and criterion groups and between the single item and multiple item scales of locus of control. Other comparisons are made using single marital status categories and several of the other variables of interest.

Analyses of variance are used for testing appropriate data which lies on an underlying continuum. Several variables based on GPA's are tested by analyses of variance. Additionally, the sum scores on the

self-esteem and the locus of control instruments are compared by this statistical method.

Pearson product moment correlations are made between the measures of psychological adjustment, between financial questions, and between other variables which have been found to be significantly different between the criterion groups, in part to decide which of these items or measures should be used in discriminate analysis. Factor analysis is used to test the psychological adjustment measures for unidimensionality and scalability and to derive psychological factors for inclusion in discriminant analysis.

Discriminant analysis is then used. This is a nonparametric statistical technique similar to multiple regression which allows a researcher to engage in interpretation to determine the best-fitting set of variables to discriminate between groups by determining which characteristics do discriminate between groups and then assessing how well they discriminate and which of the characteristics discriminate most powerfully. Additionally, discriminate analysis allows one to use a technique called classification to form equations or "discriminate functions which combine the group characteristics in a way that will allow one to identify the group which a case most closely resembles" (Klecka, 1984, p. 9).

Discriminate analysis requires at least two distinct groups with at least two cases per group and any number of discriminating variables as long as the number of subjects is at least two greater than the number of variables. It does not allow use of two highly correlated variables in the same equation nor does it allow both

summed variables and the items within that summation to be used together. The restriction against use of highly correlated variables explains in part why simple correlations must first be drawn. However, correlations which are not significant while standing alone often become significant once some other variable is controlled. Therefore, a variable which is not significant on its own can account for a significant amount of the remaining variance once another variable has first accounted for its share of the variance.

Specifically, discriminate analysis is used to develop the equation which combines the most effective set of predictors of group membership and to then find the most efficient (briefest) combination of variables which will still quite accurately predict group membership. Variables to use in trial equations are selected from an examination of group means and standard deviations, a series of Pearson correlations and examination of the correlation matrices found during factor analysis. The SPSS program uses a stepwise method of selecting, in order, those variables which together provide the greatest separation of the group means. When no more of the variables selected for use in a particular analysis have enough more discriminating power, the process stops and no more variables are entered into the equation. Multiple equations were used in attempts to find the "best fitting" equation.

A set of standardized discriminant analysis coefficients are produced with each equation. These numbers tell of the relative importance of each item used in the equation. A set of unstandardized discriminant analysis coefficients are generated as well. Each

variables' unstandardized coeffiecient multiplied by the actual value of that variable in a given case gives a weighted value for that variable. The weighted values are then summed to produce a weighted equation which can then be tested for the significance of its discriminating power.

One-half of the members of each criterion group, dropout and graduates, are randomly separated into two samples which then each contain half of the graduates and half of the dropouts. This allows first, finding equations which predict one of the two samples and second, testing the equation found on one sample to assess its predictive ability on the second sample. A double prediction format is used which allows a separate equation to be derived on <u>each</u> sample, each of which is then tested on the opposite sample to assess its predictability. Furthermore, an equation is derived from the summed group to find what set of variables would have best predicted this total dropout and graduate sample.

Once these equations are derived, the current students' responses are analyzed to see to what extent they fit the responses of the criterion groups, to see how their proportions compare to the criterion groups, and to predict the likelihood of persisting or dropping out for current students. Responses of the current student group are analyzed on those items which significantly discriminate between criterion groups to assess whether the current student group can be divided by the clustering of the significant items into groups for whom likelihood of persistence to graduation or of leaving can be predicted.

The level of significance for tests used in this study is set a priori at .05.

Although it is not part of the current study, it would be very useful and interesting to resurvey the current students in two or three years to assess to what extent they were accurately predicted to persist or to drop out.

CHAPTER 4

RESULTS OF THE STUDY

DESCRIPTION OF THE POPULATION

It seems appropriate, in looking at the entire sample from which we are drawing conclusions about the population of undergraduate women at Michigan State University who were over 25 years old in September, 1984, to look first at their student status, since that is the primary issue of interest. The sample is then described in terms of sociodemographic variables. The next appropriate descriptions are the education-specific variables such as full- or part-time school attendance, previous educational information, and expectations of return to college for those who have withdrawn.

The more subjective assessment factors including self-perceptions about income, reasons for dropping out of and returning to school, personal changes or crises that have affected schooling and reasons ror recent or possible withdrawal from the university. Academic achievement is described.

Finally, the sample is described in terms of the single items and the scales which make up the assessments of psychological adjustment. Responses to a concluding open-ended question are summarized.

SOCIODEMOGRAPHIC VARIABLES

CURRENT STUDENT STATUS

The most critical variable used in describing the women in this study is the assessment of their current student status at a point

which is two full academic years after the stage when they were identified as having been registered as undergraduate students.

Of the 361 who returned the survey, 194 or 53.7% have graduated as of June, 1980. Forty-one women or 11.4% of the sample have withdrawn from the university. Three of the forty-one dropouts indicate that they withdrew because they had achieved all they wanted. Because so few withdrew because they met their goals, they are simply not analyzed separately nor in the same criterion group with the others who withdrew.

Thirteen students or 3.6% have transferred to another school. Six or 1.7% are stopouts who had attended winter term, were not enrolled spring term, but indicate that they intend to return fall term.

Finally, 107 women or 29.6% are still current undergraduate enrollees at Michigan State University. Because there is no permissible way to sample only those who are no longer enrolled at the university or to know who would be receiving the survey prior to its mailing,

Table 1 Current Student Status

Student Status	Number	Relative Frequency	Cumulative Frequency
Graduated	194	53.7%	53.7%
Current Enrollee, MSU	107	29.6%	83.4%
Withdrew	38	10.5%	93.9%
Transferred Out	13	3.6%	97.5%
Stopped Out	6	1.7%	99.2%
Withdrew Satisfied	3	0.8%	100.0%
Total	361	100.0%	

undergraduate women who are still enrolled are included in the general survey and in the frequency counts of the total group They are not included in many of the statistical analyses since they were not in the identified subject pools of interest.

AGE

The women's ages are requested in two different ways. A survey question brackets ages into five-year interval beginning with 25 to 29. The code number each generates includes her birthdate, which is used by a computer program to generate an exact age. By categories, the women are, as might be expected, weighted toward the younger end of the age range. However, they are not as heavily weighted in that direction as one might predict. Furthermore, all five-year age brackets up to the age of 60+ have subjects in them. Although the youngest age bracket is listed as ages 25 to 29, it can, by definition of the study, only begin with those who were at least 26 3/4 years old at the time of the survey. If this age category included a full five-year range of women, the frequencies would be adjusted somewhat in favor of the younger brackets. This is one reason it is useful to compute exact ages and to run specific and separate analyses using the actual ages as drawn from the code number. Analyses using exact ages are also more accurate and powerful.

The mean age is 34.55 years with a minimum of 26.8 years and a maximum of 60.19 years. The modal age is 29 years, and the median age is 32.09 years. It is interesting to note that one quarter of the population is at least 38 years old. This is noticeably older than many of the previous studies have shown.

Table 2 Age By Five-Year Increments

Age Bracket	Number	Relative Frequency	Cumulative Frequency
25-29	122	33.8%	33.8%
30-34	99	27.4%	61.2%
35-39	78	21.6%	82.8%
40-44	35	9.7%	92.5%
45-49	16	4.4%	97.0%
50-54	8	2.2%	99.2%
55-59	2	0.6%	99.7%
60+	1	0.3%	100.%
Total	361	100.0%	

$\overline{X}$ age = 34.55 Median age = 32.09 Modal age = 29

MARITAL STATUS

A remarkably large number of women are <u>not</u> married in this sample. Those who have never married are 28.0% of the sample (n=101). Divorced women make up 17.7% of the sample (n=64). Categories allow for separated women (n=5 or 1.4%) and widows (n=2 or 0.6%), but the smallness of their numbers make separate analyses rather useless. Those who <u>are</u> married number 182 or 50.4% of the sample. Seven respondents do not give their marital status.

Table 3 Marital Status

Marital Status	Number	Relative Frequency (%)	Cumulative Frequency (%)
Always Single	101	28.0	28.0
Married	182	50.4	78.4
Separated	5	1.4	79.8
Divorced	65	18.0	97.8
Widowed	2	0.6	98.4
Not Given	6	1.7	100.0
Total	361	100.0	

PARENTAL STATUS

Women with children are asked to write in numbers indicating their number of children in each age bracket. The youngest category represents preschoolers with an age range of zero to five years. The second category represents school-age children with an age range of six to eighteen years. The last category represents grown children with an age range upward from nineteen years. Most respondents comply with the request to use a number within each category, but some only check a given category rather than writing in a number. Because the preponderance of these non-specific responses are in the 0-5 category while ages of those mothers varies widely, it is unclear whether some mistakenly are marking what they consider to be a category representing a total number of children (and who may have zero to five children) rather than having children in the zero to five year age category. As a result of that unsureness, it is decided that at least those twenty-three checks in the 0-5 category could be used in a tally of the total number of women who are parents but must be excluded from analyses of data on specific numbers of children.

A total of 202 women or 56% indicate they have children. Of those, we know the age categories of children for 173 women. Seventy-one (excluding the 23 unclear checks described above) have children under six. One hundred seventeen have school-age children from ages six to eighteen, while 43 mothers have children over eighteen years old. The 56% rate of parenthood is lower than most of the literature would suggest.

Table 4 Number Of Children Per Mother By Age Category

Children Per Mother	Ages 0-5	Adjusted Frequency (%)	Ages 6-18	Adjusted Frequency (%)	Ages 19+	Adjusted Frequency (%)
1	48	51.1	49	41.9	12	27.9
2	18	19.1	43	36.8	11	25.6
3	5	5.3	17	14.5	7	16.3
4			3	2.6	5	11.6
5			1	0.9	1	2.3
6					1	2.3
7					1	2.3
8					1	2.3
Unknown	23	24.5	4	3.4	4	9.3
Total	94	100.0	117	100.0	43	100.0

The mean number of children per mother is 2.33. The median number of children is 2.09, and the mode is two children per mother.

Table 5 Number Of Children Per Mother

Number	Absolute Frequency	Relative Frequency (%)	Cumulative Frequency (%)
1	45	26.0	26.0
2	71	41.0	67.1
3	35	20.2	87.3
4	12	6.9	94.2
5	4	2.3	96.5
6	1	0.6	97.1
7	3	1.7	98.8
8	2	1.2	100.0
Total	173	100.0	

INCOME

Respondents are asked which category best characterizes their annual household income during the last three terms that they have been in school. These categories are arranged in increasing order by $5,000 brackets, since test construction specialists suggest that

people are more likely to omit answering the question when they are asked to provide their precise income and are more likely to answer a question which allows them to only indicate a less explicit income range. The modal annual family income is the highest category offered: $40,000 or more. If more higher categories had been provided, this top income group would be more dispersed and better understood. As it is, the mean income falls into the $20,000 to $24,999 category, although this could be too low, given the clustering in the highest category. The second largest numbers of women (after the large group at over $40,000) fall into the lowest two categories of income. It is interesting that these two categories are of nearly equal size and together make up just over one-third of the entire group. Only three people do not indicate their income.

Table 6 Annual Household Income During Last Three Terms

Income Range ($)	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
0-4,999	64	17.9	17.9
5,000-9,999	58	16.2	34.1
10,000-14,999	28	7.8	41.9
15,000-19,999	24	6.7	48.6
20,000-24,999	33	9.2	57.8
25,000-29,999	27	7.5	65.4
30,000-34,999	33	9.2	74.6
35,000-39,999	24	6.7	81.3
40,000+	67	18.7	100.0
Total	358	100.0	

WEEKLY EMPLOYMENT RATE

Women report their employment rates for the last three terms they were in school by checking one of the categories which range from "not at all" by ten-hour brackets through "over 40 hours per week." The largest group consists of those who did not work at all (n=101 or 28.1%). Of those who did work, the distributions are remarkably even between those who worked up to quarter-time, up to half time, up to three-quarter time, and up to full-time. More than one-tenth worked over forty hours weekly.

Table 7 Weekly Employment Hours During Last Three Terms

Hours Worked	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
None	101	28.1	28.1
1-10	49	13.6	41.7
11-20	61	16.9	58.6
21-30	52	14.4	73.1
31-40	57	15.8	88.9
Over 40	40	11.1	100.0
Total	360	100.0	

EDUCATIONAL VARIABLES

PREVIOUS EDUCATION

Approximately half of the women (n=181 or 50.1%) have entered college three or more times. The second largest group (n=140 or 38.8%) have entered college twice. Only 37 (10.2%) are in their first college experience, and three did not respond to this question.

A parallel question asks how many years of education each had accumulated before this last college entrance. A plurality of 120

(33.2%) indicate they had two years of college before they entered this time. The second highest category consists of the 81 (22.4%) who had a remarkable four years or more of college before they entered this time. For at least fifty women this means they had a previous degree, since that many people indicated elsewhere in the questionnaire that they do have a previous degree (although the question was not specifically asked). Many cite this previous degree when asked for reasons they did not complete a degree before age 25. Others give a non-recent year in response to a request for their graduation date. We can only speculate about the 31 others who mark a response of four or more years of previous education. They could have changed majors or lost credits along the way or may be counting the total number of years they have attended school without having achieved four full years of credit toward a degree.

Table 8 Years of Education Prior to Last College Entrance

Prior Education	Absolute Frequency	Adjusted Frequency	Cumulative Frequency
High School or GED	38	10.6	10.6
1 Year College	54	15.0	25.6
2 Years College	120	33.3	58.9
3 Years College	67	18.6	77.5
4 Or More Years College	81	22.5	100.0
Total	360	100.0	

Given that 212 women (58.7%) have two years or less of previous education, including the 38 women with only a high school diploma or a General Education Diploma (GED), it is all the more impressive that

194 of the 361 respondents have already graduated in this two year period.

RATE OF RECENT COLLEGE ENROLLMENT

Almost exactly half of the respondents have been full-time students during the most recent three terms of education (n=179 or 49.3%). One hundred thirty-five (37.3%) have been part-time students and forty-five (12.2%) have been both over the last three terms. Two do not respond.

DROPOUTS' ATTITUDES

Three questions are asked only of those who have withdrawn to assess their attitudes about having withdrawn. The first question inquires about future educational plans. Of those who have been out more than one term, fourteen say they will return to Michigan State University at some time in the future. Half of that number (7) report that they will continue their education sometime, somewhere, but apparently have no certain plans now. Two indicate they will return to Michigan State University in the Fall term, 1986. One will attend elsewhere in the fall, 1986. Fourteen of the withdrawers do not respond to this question.

When asked whether they feel good about their decision to leave Michigan State University, twenty-seven answer. Twelve (44.4%) say they rarely or never feel good about this decision. Two indicate they occasionally feel good about it. Seven usually feel good about this decision and six always feel good about the decision. Some of those six who always feel good wrote messages saying it was the right decision considering family or job responsibilities or lack of

flexibility of the university at the time, but that when other circumstances change, they do want to continue their education. Therefore, a total of thirteen primarily feel good about this decision and fourteen primarily do not.

These responses parallel quite well the answers to the next question: "Do you wish you had stayed in college?" Of the twenty-nine replying, thirteen or 44.8% say they frequently wish they had stayed in college. Nine sometimes wish they had stayed. Sixteen have that wish occasionally. Only one rarely or never wishes she had stayed in college.

These responses also match well with their indications of why they left the university. Contrary to expectations, few left because they had achieved all they wanted from education. Primarily they left for other sorts of reasons which apparently caused them to feel they could not go on at this time in this place, but they wish they had been able to do so. (See Table 21.)

SPOUSES' EDUCATION

Married women are queried about the highest level of their spouses' education. Interestingly, there are 189 replies to that question although only 182 are married. Some who respond list themselves as divorced. Some single women indicate they are cohabiting and include their partner's information. Of the 182 who are married, 94.5% are married to men with at least some college education.

The most common amount of education is a Bachelor's degree, held by 63 of the husbands (34.6%). Fifty-six (30.8%) have some college education. Twenty-five others (13.7%) have a Master's degree or its

Table 9 Level Of Married Spouses' Education

Prior Education Achieved by Spouse	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Some/All High School	10	5.5	5.5
Some College	56	30.8	36.3
Bachelor's Degree	63	34.6	70.9
Master's Degree	25	13.7	84.6
Doctorate	28	15.4	100.0
Total	182	100.0	

equivalent (ex.: law degrees were written in). Twenty-eight (15.4%) have a Doctorate. Ten mark the space indicating their spouses have some or all of a high school education.

SUBJECTIVE SELF-ASSESSMENT OF INCOME AND EDUCATIONAL VARIABLES

INCOME

Asked to assess the perceived adequacy of their family income while they were in school this last time, the largest group say that their income was adequate (n=162 or 45.0%). However, a disturbingly large group report their income as being inadequate (n=99 or 27.4%) or very inadequate (n=49 or 13.6%). Only one did not respond to this question while 50 (13.9%) call their income very adequate. This means that 41% of the women feel their family income was inadequate while attending school according to their individual assessments of adequacy or inadequacy.

Table 10 Adequacy Of Family Income During College

Income Adequacy	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Very Adequate	50	13.9	13.9
Adequate	162	45.0	58.9
Inadequate	99	27.5	86.4
Very Inadequate	49	13.6	100.0
Total	360	100.0	

A separate question asks whether finances during college were a problem. It is interesting to note that while a majority (59%) believe their income was "adequate", a majority (64.5%) also believe finances have been a major or a moderate problem. Only seventy-one (19.7%) find finances to have been no problem at all, and 56 (15.5%) say they were a minor problem.

Table 11 Finances During College: Rating As a Problem

Problem Rating	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Major Problem	97	27.1	27.1
Moderate Problem	134	37.4	64.5
Minor Problem	56	15.6	80.2
Not a Problem	71	19.8	100.0
Total	358	100.0	

While only 13.6% describe their family income as very inadequate, a larger group or 17.7% had an annual income of under $5,000, and 26.9% indicate that finances were a major problem. Therefore, apparently inadequacy of income and whether or not finances are perceived as a problem are not as clearly the same issue as might be

presumed. It thus appears appropriate to ask about both adequacy and whether or not finances are a problem rather than to use only one of those questions as a complete substitute for the other.

REASONS FOR PREVIOUS WITHDRAWAL

Several possible responses are offered to a question about why they had not completed their baccalaureate education before they were twenty-five years old. Subjects mark as many responses as each considers appropriate. They are then asked to indicate the one main reason for that previous noncompletion.

A total of 324 women check one or more reasons from the fourteen choices offered. Several use this opportunity to indicate that they did receive a degree before age twenty-five but came back now for undergraduate credit for another reason.

Although it would not be surprising if marriage was the most frequent reason for previous withdrawal as it has been on other previously reported surveys, a lack of purpose or goal is instead the most common single reason marked for earlier dropping out (n=157). This is the most frequently marked category by both current students and transfers although it is the second most frequent response for graduates and ties for second place for dropouts. A very close second reason is the lack of money. This ranks as the first reason for stop-outs and for graduates while being the second reason for current enrollees and ties for second place among those who withdrew (n=154).

The third most commonly marked reason for dropping out previously is the first reason among those who have currently withdrawn: marriage. This is given as a reason by 144 respondents, which means

Table 12 Reasons For Previous Withdrawal

	Current Student Status						
Reason for Previous Withdrawal	Graduate	Current	Withdrawn	Transfer	Stopout	Achieved All	Total
Marriage	75	43	19	3	4	0	144
Having Children	73	39	8	2	4	0	126
Family Responsibilities	41	22	6	1	3	0	73
Personal Problems	25	24	2	3	4	0	55
Lack Family Support	44	17	6	0	1	1	69
Lack Friend Support	9	5	0	0	0	0	14
Lack Time	33	20	7	1	1	0	62
Academic Difficulty	17	12	3	2	0	0	34
Lack Interest	47	32	7	3	0	1	90
Lack Purpose, Goal	82	54	13	1	5	1	157
Lack Money	87	47	13	1	5	1	154
Wanted to Work	50	22	11	2	1	1	87
Job/School Conflict	45	15	11	4	1	0	76
Other	30	15	7	3	1	1	57
Total	658	367	113	26	30	6	1198

it is only the third ranking response for graduates and current enrollees and ties for third among transfers and for second among stop-outs. The other rather heavily indicated reason is "having children" which ties for second among current stop-outs, is in fourth place for graduates and current students, and ranks sixth among those who have now again withdrawn.

Several responses cluster next. In order these are: lack of interest, wanting to work, conflict of job with school, family responsibilities, lack of family support, lack of time and other nonspecific reasons.

What is probably the most surprising of the responses is that academic difficulties are second to last in terms of reasons for having previously dropped out. The least frequent reason is lack of friends' support. In fact, it is only marked by a few graduated and current students and not by anyone in other categories.

When limited to indicating one <u>main</u> reason for previous noncompletion of college, 299 reply. Here the differences are even more striking. Lack of purpose or goal is the primary reason for sixty-six or 22.1% of those responding. The next most frequent responses are a cluster marked by only half as many women as the first reason: lack of money, cited by only thirty-two or 10.7% of those responding; having children, selected by thirty-one or 10.4% of those responding; having a previous degree selected by thirty or 10.0%. Other responses heavily clustering around twelve responders: family responsibilities (n=15), wanting to work (n=13), job/school conflict (n=12), lack of family support (n=12) and personal problems (n=10).

Table 13 Main Reason For Previous Withdrawal

Main Reason for Previous Withdrawal	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Marriage	22	7.4	7.4
Having Children	31	10.4	17.7
Family Responsibilities	15	5.0	22.7
Personal Problems	10	3.3	26.1
Lack Family Support	12	4.0	30.1
Lack Friend Support	1	0.3	30.4
Lack Time	6	2.0	32.4
Academic Difficulty	4	1.3	33.8
Lack Interest	23	7.7	41.5
Lack Purpose, Goal	66	22.1	63.5
Lack Money	32	10.7	74.2
Wanted to Work	13	4.3	78.6
Job/School Conflict	12	4.0	82.6
Other	22	7.4	90.0
Previous Degree	30	10.0	100.0
Total	299	100.0	

Note: "Previous Degree" includes those who marked "Other" and then wrote in that they checked that to indicate an earlier degree and those who marked nothing but wrote in such a degree instead.

Marriage is selected by twenty-two or 7.4% as the primary factor in earlier departure and academic difficulty by only 4 or 1.3%.

If we combine the sixty-six who indicate lack of purpose or goal with those who lacked interest (23), a clear one-third (99) of the respondents say they did not earlier complete college simply because it was not attracting them or helping them focus at that time. Their presence back in college now appears to say that something important has changed for them in the interim.

Scores are also summed across what are labeled "family related" reasons which consists of marriage, having children, and family

responsibilities. This category is chosen by 179 women. One of these is marked by 65 women (18%), two by 62 persons (17.2%), and all three by 52 persons (14.4%). Another summed category is "personal and support problems" which encompasses personal problems, lacking support from family, and lacking support from friends. A total of 116 persons use this category with 94 marking one of these responses, 21 marking two of them, and one marking all three. When combining those who wanted to work with those who had a job/school conflict and therefore had to leave school, 131 responders use this category. Ninety-eight mark one of these "job related" reasons and 33 mark two. The final combined category consists of those who "lack focus". This includes both those who say they did not have a goal or a purpose as well as those who expressed a lack of interest in school. A total of 183 women cite this category. One hundred eighteen indicate one of the reasons and 65 mark two.

Table 14 Total Reasons For Previous Withdrawal

Total Number of Reasons	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
1	24	7.4	7.4
2	55	17.0	24.4
3	79	24.4	48.8
4	75	23.1	71.9
5	52	16.0	88.0
6	18	5.6	93.5
7	12	3.7	97.2
8	3	0.9	98.1
9	4	1.2	99.4
10	2	0.6	100.0
Total	324	100.0	

This now clarifies a real closeness of frequencies for the most prominent type of reasons for earlier withdrawal. A lack of focus (n=103) and family issues (n=179) are clearly primary.

It seems useful to total the number of reasons for previous dropping out. Of the 324 who give any reason, the most common number of reasons marked is three, selected by seventy-nine women (24,4% of those marking any reasons). The mean number of reasons marked is 3.7 and the median is 3.55. Twenty-four indicate only one reason (7.4%), four report nine reasons (1.2%) and ten mark only two reasons (2.6%).

REASONS FOR RETURN TO SCHOOL NOW

All 361 women report their reasons for this most recent college entrance. The strikingly large number of 323 women indicate that at least one reason for return is personal satisfaction. This category is chosen by the most persons in every student status category with the exception of being tied for first with "getting a degree" among stopouts. Uniformly across categories getting a degree is the next most frequently chosen response, marked by a total of 259 women. One hundred ninety-one say they came to prepare for a career change, the third ranked reason among current enrollees, transfers and dropouts. Career change is the fourth-ranked reason for graduates and stop-outs. "Prepare for a job" is marked by 182 women. This is the third ranked reason among graduates and stop-outs and the fourth-ranked reason for all others. Fifth is the need to be seen as a success.

A different way to understand this question is to categorize these seven different reasons into three summary groups. The first category is called "career reasons" for returning and includes to

prepare for a job, to keep or to upgrade a job, and make a career change. The second category, "personal reasons", includes personal satisfaction and the choice to get a degree. The third category is labeled "social reasons" and includes pressure from others and to be seen as a success.

Table 15 Reasons For Return To College

	Current Student Status						
Reason for Return	Grad-uate	Current Student	With-drawer	Trans-fer	Stop-Out	Achieved All	Total
Prepare For Job	108	57	9	4	3	1	182
Keep, Upgrade Job	23	13	7	3	1	1	48
Prepare For Career Change	99	61	20	7	2	2	191
Personal Satisfaction	174	98	31	12	5	3	323
Get a Degree	139	81	23	11	5	0	259
Pressure from Others	21	7	2	1	1	0	32
Be Seen As a Success	70	33	8	3	2	0	116
Other	23	5	1	1	0	0	30
Total	657	355	101	42	19	7	1181

Personal reasons for return are cited by 328 women. Both personal choices are marked by 233 (71.9%) and 95 (28.1%) give one personal reason. A total of 309 claim career related reasons. Of these, 202 (65.4%) give one such reason, 99 (32.0%) give two of these reasons, and eight (2.6%) give all three career related reasons for returning now. Social reasons are indicated by 130 women with eighteen (13.8%) choosing both such responses and 112 (86.2%) giving only one of the social reasons.

Table 16 Total Number Of Reasons For Last College Entry

Total Number of Reasons	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
1	22	6.1	6.1
2	73	20.2	26.3
3	115	31.9	58.2
4	86	23.8	82.0
5	55	15.2	97.2
6	5	1.4	98.6
7	3	0.8	99.4
8	2	0.6	100.0
Total	361	100.0	

Again, the most frequent number marked is three reasons. The mean number of reasons is 3.3, and the median point on the list of reasons is 3.2. One hundred fifteen or 31.9% give three reasons and two check all eight possible reasons. Twenty-two (6.1%) give only one reason.

Table 17 Main Reason For Return To College

Main Reason	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Prepare For Job	54	17.4	17.4
Keep, Upgrade Job	11	3.5	21.0
Prepare For Career Change	72	23.2	44.2
Personal Satisfaction	112	36.1	80.3
Get A Degree	45	14.5	94.8
Pressure From Others	5	1.6	95.5
Be Seen As A Success	2	0.6	97.1
Other	9	2.9	100.0
Total	310	100.0	

When only one <u>main</u> reason can be given, the one most important reason for returning to college is cited as "personal satisfaction" by

112 or 36.1% of the 310 responders. This choice widely leads the second reason, career change, which 72 (23.2%) select. In order, the next most popular responses are to prepare for a job, (n=54, 17.4%) and to get a degree (n=45, 14.5%). Only a few indicate the primary motivator as being to keep or to upgrade a job (n=11, 3.5%), pressure from others (n=5, 1.6%) or to be seen as a success (n=2, 0.6%). Nine mark "other".

Another way to summarize reasons for return is to note that of those women who indicate the one main reason for return, 157 (50.6%) persons give a personal reason, 137 (44.2%) indicate a career reason, and only seven (2.3%) give a social reason as the primary reason to return now to college.

Table 18 Primary Type Of Main Reason To Return

Type of Reason to Return	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Career	137	44.2	44.2
Personal	157	50.6	94.8
Social	7	2.3	97.1
Other	9	2.9	100.0
Total	310	100.0	

CHANGE OR CRISES CONTRIBUTING TO THE DECISION FOR THE RECENT COLLEGE ENTRY

While sixty-five people say no changes or crises contributed to their decision to return to school and nine do not respond at all to this question, 287 people (79.5%) say such effects occurred. Respondents are asked to both indicate which crises or changes had

occurred and to rank each by a scale of 1 (little) to 4 (severe), indicating their assessment of the severity of the change or crisis. The eight possible topics are marriage, family, health, personal problems, job, move, family member status and an unspecified other topic. The largest number of responses fall in the "severe" category for all of eight possible topics except "family" where the largest number of responses are in the "moderate" category and the "severe" category has the second largest group of responses.

Nearly half of the sample indicate that a job change or crisis contributed to their schooling decision. Of these 146, 84 (57.5%) say their change or crisis was severe. Approximately 20% (n=75) list the second most common category as "other". Here, however, a surprisingly high 84% say the change or crisis was severe.

Table 19 Type And Severity Of Changes/Crises Contributing To Return

	Severity								
	Little		Mild		Moderate		Severe		
Change/Crisis In:	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	Total
Marriage	1	1.8	2	3.6	15	27.3	37	67.3	55
Family	1	2.1	5	10.6	24	51.1	17	36.2	47
Health	1	5.9	1	5.9	5	29.4	10	58.8	17
Personal Problems	0	0.0	2	3.8	25	47.2	26	99.1	53
Job	5	3.4	16	11.0	41	28.1	84	57.5	146
Move	2	6.1	3	9.1	9	27.3	19	57.6.	33
Family Member Status	0	0.0	1	2.9	10	28.6	24	68.6	35
Other	2	2.7	1	1.3	9	12.0	63	84.0	75
Total	12		31		138		280		461

Several categories hover near 14% of the sample: Marriage (n=55), personal problems (n=53) and family issues (n=47). Less than

10% indicate a change of family member status (n=35) or a move (n=33) contribute to this decision and half that number (n=17) say that health made a difference. However, despite being chosen by small total percentages, the total numbers of people effected by such changes are still important.

It is curious that only a very few choose the category "little" and only approximately 3% to 11% use the category "mild". For most people, either the change or crisis was at least moderate or it seemed to have little to do with the educational decision. This could suggest that these were truly experienced as "crises" rather than or in addition to being "changes" that occurred.

Of the 287 women responding, 150 or 52% of those indicating any changes or crises at all say they experienced one crisis. Eighty-five (30%) tell of two crises, 42 (15%) indicate 3 crises; eight (3%) give four crises; and two (1%) list five crises. Thus the mean among these 287 women is 1.7 different kinds of crises and the median is 1.46 different types of crises.

CHANGE OR CRISES RESULTING FROM THE LAST ENTRANCE TO COLLEGE

One hundred twenty-two persons say that no changes or crises resulted from their return to college. This is nearly twice as many as indicated no precipitant changes or crises <u>before</u> their return. Of the rest, 212 (58.7%) mark one or more resultant changes or crises. They use the same categories as in the previous set of changes or crises, although here the distribution is somewhat different. While more still mark the "severe" category (n=127), nearly as large numbers are in the "moderate" category (n=103). Furthermore, the proportions

of marks in the "little" and "mild" columns have increased in this section.

The most striking difference is that only half as many people indicate a job change or crisis as in the previous section (n=77 as compared to the previous n=146), although it is still the leading change or crisis (positive or negative direction is not indicated). Here family (n=54), personal problems (n=53) and marriage (n=51) nearly tie for being the next most common.

Table 20 Type And Severity Of Changes/Crises Resulting From Return

	Severity								
	Little		Mild		Moderate		Severe		
Change/Crisis In:	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	Total
Marriage	7	13.7	11	21.6	12	23.5	21	41.2	51
Family	1	1.9	8	14.8	26	48.1	19	35.2	54
Health	1	4.2	6	25.0	5	20.8	12	50.0	24
Personal Problems	3	5.7	9	17.0	22	41.5	19	35.8	53
Job	4	5.2	9	11.7	23	29.9	41	53.2	77
Move	7	18.4	6	15.8	11	28.9	14	36.8	38
Family Member Status	1	10.0	1	10.0	3	30.0	5	50.0	10
Other	2	4.4	3	6.7	13	28.9	27	60.0	45
Total	26		53		115		158		352

Another major difference is that in only one of these leading categories did a majority of persons mark that the problem is severe. It is interesting to note that exactly the same number and, in fact, many of the same people, cite personal problems here as did in crises or changes before reentry, although the severity seems to have decreased somewhat. Nearly the same number report having moved. The

major decreases are in jobs, the category labelled "other", and in changed family member status.

Looking again at the total number of recent changes or crises marked we find that, of the 212 who list any, slightly over half (n=109 or 51%) cite only one change crisis, which is a similar percentage to the previous category but is only two-thirds as many people. Fifty-nine (28%) mark two changes crises, thirty-one (15%) check three, eight (4%) claim four, four (2%) give five, and one says she experienced six categories of crises or changes as a result of her return to college. The mean at 1.78 is somewhat higher than for previous changes or crises although the mode remains at one. When the scores of their crises or changes are summed, the mean is 5.66 which is slightly lower than that for changes or crises before return.

It is clear that these students have been experiencing stresses in their lives and that many of these stresses are perceived as having been quite severe.

REASONS FOR RECENT OR CONTEMPLATED WITHDRAWAL

Those respondents who have left the university for any reason are asked to check all reasons which caused them to leave. Current students are asked to mark the reasons which may still cause them to leave. Each marks as many as apply from a list of twenty-one possible reasons and are then also asked to select which would be the one main reason for withdrawal.

When multiple reasons are marked, overall the most frequently suggested possible or actual reasons for withdrawal, in order, are: 1) finances, 2) a tie of family responsibilities and not enough time,

4) too many roles, 5) scheduling problems, 6) job responsibilities and 7) needing a break or a change.

Several items are selected by only a few: lack of family support or others' support, academic difficulties, problems with faculty and a move out of the area. Despite some suggestions in the literature to the contrary, lack of self-confidence is only indicated by twenty women, eight of whom graduated and seven who are still in school.

However, for those who actually have withdrawn, finances is only the fourth-ranked reason. The most frequently marked response for withdrawers is family responsibilities. Not enough time and job responsibilities tie for second among those who actually have withdrawn.

Interestingly, several who graduated completed this section of the survey. The largest group of them (n=20) say finances could have caused them to leave. The second most frequently marked reason for graduates is needing a break or a change.

Transfer students say lack of classes or program needed and then scheduling problems are the most frequent reasons for having left.

When asked for the <u>main</u> reason for withdrawal, finances become clearly the single most important reason, cited by 25.6% of the 133 who actually mark a primary reason. Family responsibilities and the general category of "other" come next, followed by scheduling difficulties which is chosen by 6.8%. There is little uniformity to other responses. Graduates (n=34) most frequently cite finances (n=11). No other category is chosen by more than three graduates.

Table 21 Current Reasons For Withdrawal

	Current Student Status					
Reason for Withdrawal	Graduate	Current Student	Withdrawer	Transfer	Stop-Out	Total
Achieved All Desired	7	8	1	1	0	17
Family Responsibilities	11	19	17	0	3	50
Personal Health	5	9	5	0	1	20
Personal Problems	9	14	7	0	1	31
Family Illness/Death	4	9	3	0	1	16
Job Responsibilities	9	15	14	3	1	42
Too Many Roles	8	26	8	2	2	46
Not Enough Time	8	25	14	2	1	50
Lack Self-Confidence	8	7	3	2	0	20
Lack Family Support	1	8	1	0	0	10
Lack Others' Support	2	3	1	0	0	6
Classes/Program Lacking	4	7	3	6	1	21
Need Break Or Change	17	13	5	0	3	38
Finances	20	37	13	1	4	75
Academic Difficulties	8	6	2	0	1	17
Scheduling Problems	7	23	7	5	1	43
Problems With Faculty	3	3	1	3	1	11
Problems With University Bureaucracy	10	11	4	2	0	27
Lack Interest	9	7	3	0	2	21
Moved Away	3	4	3	0	0	10
Other	4	10	6	5	2	28
Total	157	264	121	32	25	599

Table 22 Primary Current Reason For Withdrawal

Reason for Withdrawal	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Achieved All Desired	5	3.8	3.8
Family Responsibilities	13	9.8	13.5
Personal Health	5	3.8	17.3
Personal Problems	3	2.3	19.5
Family Illness/Death	3	2.3	21.8
Job Responsibilities	6	4.5	26.3
Too Many Roles	6	4.5	30.8
Not Enough Time	4	3.0	33.8
Lack Self-Confidence	5	3.8	37.6
Lack Family Support	0	0.0	37.6
Lack Others' Support	0	0.0	37.6
Classes/Program Lacking	3	2.3	39.8
Need break Or Change	3	2.3	42.1
Finances	34	25.6	67.7
Academic Difficulties	5	3.8	71.4
Scheduling Problems	9	6.8	78.2
Problems With Faculty	0	0.0	78.2
Problems With University Bureaucracy	6	4.5	82.7
Lack Interest In Classes	6	4.5	87.2
Moved Away	2	1.5	88.7
Other	15	11.3	100.0
Total	133	100.0	

Among withdrawers, three cite family responsibilities and only three cite finances as the main reason for withdrawal.

Again, it is interesting to attend to the total number of reasons marked. The modal number is two, marked by 34 (20.7% of the 164 responders), followed closely by three responses. Fewer choose from six to sixteen of the twenty-one choices.

Given that we now understand something about who these students are sociodemographically, educationally, and in terms of what changes or crises have gone on before and after their return to college, it appears appropriate to look next at the academic record these women have accumulated and then to assess the psychological adjustment they have come to along the way.

ACADEMIC ACHIEVEMENT

Prior to this last entry to college, the mean grade point average (GPA) of the 288 who both had previous credits and could remember their previous GPA is 3.01, and their median GPA of 3.10. The most common previous grade point average was the 3.5 achieved by thirty women. The lowest is a 1.0 held by four subjects. Nine women had a 4.0 GPA prior to this last educational experience. Twenty-six responders indicate they cannot remember their previous GPA, although most of those do answer the question of whether their present GPA is higher, lower or approximately the same as it had been before. Therefore, apparently they know the range but not the exact number. The forty-seven who say they have no previous GPA is slightly more than the number who have not previously attended college: Some write in that they were not previously on a numerical grading system.

All except two are able to provide a cumulative GPA, and by far the most students provide at <u>least</u> one digit past the decimal point. The mean total GPA to date is 3.17. The GPA for the most recent single term is 3.42.

One way of understanding these grade points is to notice the difference between the current cumulated GPA (3.17) and the previous GPA (3.01) by subtracting the latter from the cumulated GPA. The mean difference is +.16, meaning that the cumulative GPA is higher than the previous GPA, even though several speak of the increased difficulty of classes here compared to previous schools, especially community colleges.

Table 23 Grade Point Averages (GPA's)

Type of Grade Point Average	Mean	s.d	Max.	Min.	Median	Mode
Cumulative GPA (Cum.)	3.167	.462	4.00	1.80	3.200	3.00
Last One-Term GPA (Recent)	3.417	.568	4.00	1.00	3.501	4.00
Previous GPA (Prev.)	3.014	.651	4.00	1.00	3.096	3.50
Difference: Cum. Minus Prev. GPA	.158	.569	2.10	-1.75	.0833	
Difference: Recent Minus Cum. GPA	.249	.524	1.80	-2.00	.2000	

Another way to look at differences is to subtract the cumulative GPA from the last one-term GPA to assess how they are doing currently compared to the total weight of the GPA they carry with them. This difference is +.25, meaning that the last one-term GPA is a quarter of a point above their total cumulative GPA. This difference is computed with only four cases missing because of missing data.

The question is raised of whether the present GPA is individually higher than before, approximately the same as before, or lower than before they returned to college. One hundred ninety-seven or 59.3% claim an increased GPA, while only a quarter of that number (n=52 or 15.7%) say they currently have a lower GPA than before. Eighty-three (25%) claim no clear change in their GPA's. It is interesting to note a source of variance here, however: More people answer this question than claim any previous college experience. It is likely that those extra people are making comparisons to high school achievement.

SELF-REPORTED SINGLE INDICATORS OF ADJUSTMENT

EXPECTATION OF DEGREE COMPLETION

Subjects are asked whether, while in college this last time, they expected to complete a degree without any further breaks. Of the 313 responses, a relatively large 74.8% or 234 claim they have been quite sure of achieving their degrees without further breaks. Another forty-five (14.4%) were sure much of the time. That leaves only 11%

Table 24 Expectation Of Completing Degree Without Further Breaks

Degree of Expectation	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Yes, Quite Sure	234	74.8	74.8
Sure Much Of The Time	45	14.4	89.1
Unsure Much Of The Time	26	8.3	97.4
No	8	2.6	100.0
Total	313	100.0	

who were less than sure, including the twenty-six who claim to have been unsure much of the time and the eight who acknowledge they did not expect to remain and complete a degree this time. Of those who were less sure, six actual withdrawers and ten graduates were unsure much of the time and four dropouts did not expect to complete their degrees.

LIFE SATISFACTION

Of the 316 assessing their life satisfaction as a whole during school, twenty-five percent were very satisfied and 58.9% say they were mostly satisfied. This represents a satisfied group of an accumulated 84% of the subjects. A smaller group of 14.6% claim to have been mostly dissatisfied and 1.6% report being very dissatisfied. Withdrawers make up only four of the dissatisfied and one of the very dissatisfied groups. Graduates are more heavily dissatisfied (n=29).

Table 25 Life Satisfaction During And Since School

	During School			Since School		
Degree of Satisfaction	Number	Adjusted Freq. (%)	Cumulative Freq. (%)	Number	Adjusted Freq. (%)	Cumulative Freq. (%)
Very Satisfied	79	25.0	25.0	59	27.6	27.6
Mostly Satisfied	186	58.9	83.9	116	54.2	81.8
Mostly Dissatisfied	46	14.6	98.4	35	16.4	98.1
Very Dissatisfied	5	1.6	100.0	4	1.9	100.0
Total	316	100.0		214	100.0	

This does not differ greatly from the responses to the query about life satisfaction as a whole since leaving school. Obviously, this question excludes current students so yields smaller response

rates. Nevertheless, the proportions are quite similar with 81.8% (n=175) being primarily satisfied and 18.2% (n=39) being primarily dissatisfied, which is a two percent increase in the dissatisfaction group. Of these, withdrawers account for seven (one very dissatisfied) and graduates for 25 (three very dissatisfied).

HAPPINESS

The frequencies on the foregoing more cognitive satisfaction measures are relatively close to the percentages found in answer to a separate question about their happiness during school, which is a more emotional state according to the literature. Of the three hundred sixty replies to this question compared to the life satisfaction responses, a somewhat smaller 19% report they have been very happy, a larger 66% mark that they have been mostly happy (or an accumulated 85% being happy), fourteen percent report being not very happy and one percent claim to be very unhappy. Graduates account for 34 of the fifty who were not very happy and for one very unhappy student. Dropouts include four who were not very happy during school.

Table 26 Happiness During School

Degree of Happiness	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Very Happy	67	19	19
Pretty Happy	239	66	85
Not Very Unhappy	50	14	99
Very Unhappy	4	1	100
Total	360	100	

GETTING WHAT IS WANTED OUT OF LIFE

One-third say they are able to get the things they wanted out of life very well. Another 55% say they can at least adequately get the things they want out of life. Only ten percent report doing poorly at getting what they want including 19 graduates and three withdrawers, and two percent claim to be doing very poorly at achieving what they want including one dropout and three graduates.

Table 27 Getting What Is Wanted Out Of Life

	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Very Well	118	33	33
Adequately	200	55	88
Poorly	35	10	98
Very Poorly	8	2	100
Total	361	100	

COPING WITH/HANDLING CRISES

Thirty-five percent (n=125) claim to cope with or handle crises in their lives very well; fifty-four percent (n=196) handle crises at

Table 28 How Well I Cope With/Handle Crises

	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Very Well	125	35	35
Adequately	196	54	89
Not Very Well	36	19	99
I Am Overwhelmed	4	1	100
Total	361	100	

least adequately; ten percent (n=36) say they do not do this very well, and one percent (n=4) acknowledge being overwhelmed by crises.

These frequencies are very similar to those in response to the question on getting the things wanted out of life. Sixteen graduates and eight dropouts feel negatively about their own crisis-handling ability.

SELF-ASSESSMENT OF DEGREE OF CONTROL OVER OWN LIVES

Each woman assesses her degree of control over her own life. Seventeen percent claim to have complete control, seventy-one percent say they have much control, eleven percent acknowledge having little control and one percent say they have no control over their own lives. Twenty-three graduates and five dropouts see their lives as not being much under their own control.

Table 29 Self-Assessment Of Control Over Own Life

	Absolute Frequency	Adjusted Frequency (%)	Cumulative Frequency (%)
Complete Control	61	17	17
Much Control	255	71	88
Little Control	41	11	99
No Control	2	1	100
Total	359	100	

FORMAL TEST BATTERIES

LOCUS OF CONTROL

In Duttweiler's twenty-eight item Locus of Control scale, respondents write in a number representing one of five possible responses to each question. This allows a median choice as well as

moderate and strong positive and negative responses. After recoding responses to allow all so-called internal responses to be in one direction, a higher score indicates a more internal locus of control and a lower score indicates a more external locus of control. The possible range of scores is from the extreme external response of 28 to the extreme internal response of 140. Two subjects skip this scale entirely although completing the rest of the survey. Nine omit one or more responses and their responses are therefore not summed into a total score. Of the 350 who do respond fully, the mean is 106.20 and the mode is 106. All of the scores achieved by at least ten persons are between 97 and 117 which covers the range between 21% and 83% of the respondents. Although the scale allows scores as low as 28, the lowest score for anyone in this study is 70. Five percent score below 86 and five percent score above 126. (3:10)

SELF ESTEEM

Rosenberg's Self-Esteem scale consists of ten items and allows one of four possible responses to each statement about oneself. When the responses are recoded so they are all in the same direction, the lowest possible score of ten represents extremely low self-esteem and the highest possible score of forty represents very high self-esteem. The range of scale scores is from sixteen to forty, with forty also being the modal response given by 11.2% of the women out of the 357 complete self-esteem batteries. The mean is 33.9 and the median is 34.9. Three-quarters of the responses lie between 30 and 40, while the highest quartile of the responses is above 37. This seems to

indicate a relatively high rate of self-esteem in this sample although the lower quartile of responses are quite widely distributed.

RESPONSES TO OPEN-ENDED QUESTION

A remarkable number of the respondents, 245 or 67.9% choose to make individualized responses to the open-ended question which elicits information beyond that asked on the questionnaire.

When the open-ended responses are categorized and ranked, the two raters are relatively consistent on all except three categories of responses of women's comments and are in somewhat closer agreement about their suggestions of questions to raise. One rater finds a few more individual responses to code than the other, especially when categorizing the comments made about respondents' own situations.

Comments are made most often about support. Some indicate that support was important to them; others say support was needed and may have been missing. Comments here include the desire for a social life, generally positive but sometimes negative reactions to the support of family and friends, reflections on the support offered by the university or the lack thereof, and expressed desires for support groups and programs.

Scheduling receives the second highest number of comments, particularly complaints about the lack of night classes or lack of much choice of night classes and also about required classes which are never offered at night, the rigidity of scheduling (classes always offered at the same impossible-to-go-then time) and the desire for more classes which have at least one section offered for longer blocks of time and on fewer days per week.

Finances and financial aid (and the difficulty of getting or the unavailability of aid for older students) tie for second on the list of comments. Fourth are the many comments about the multirole balancing these women often do. Included here are issues of overload, time conflict, prioritizing, role conflicts, etc.

Attitudes and discrimination toward the older woman student, on the basis of sex and/or age rank fifth. These include in largest numbers perceptions of bias from faculty but also from other students and staff.

Sixth ranked are attitudes held by the respondent about her experience as a whole as an older student and how she perceives of herself as an older student in a younger university setting.

Four categories tie for seventh place: 1) Expressions of positive or negative attitudes about Michigan State University, including several by women who clearly state they are highly unhappy alumni, 2) Parking problems, 3) Statements (mostly negative) about the quality of education specifically including instructors and/or curriculum, and 4) Postgraduate goals and experiences including assessments of whether the degree was worth the effort. The last category of comments with enough responses to rank is academic, career and other counseling and advising as done in many departments on campus.

The many responses which do not fit well into other categories are summed under the heading of "miscellaneous". Each of the raters went one step further in comsidering these to be personal (largest

subcategory for both raters), university-related (second for both) or situational (last for both) issues.

The women raise questions which mostly fit into the same categories although these rank somewhat differently. The largest number of women suggest that questions should be asked about their postgraduate experience. Next, they want questions about the support they had, lacked, or wanted and the sources of that support. They would like to answer questions about attitudes toward older women students in the university, multiple role balancing, sources and adequacy of finances, attitudes about themselves as older students, child care, and counseling. Again, responses having too little similarity to others to be categorized are labelled "miscellaneous"

Table 30 Open-Ended Responses by Categories

Category	# Comments		Ranking		Overall	# Questions		Ranking		Overall
	Rater	Rater			Ranking	Rater	Rater			Ranking
	A	B	A	B		A	B	A	B	
Support	60	52	1	1	1	32	28	2	2	2
Scheduling	44	35	2	3	2	5	10		9	
Finances	35	36	3	2	2	14	16	4	6	5
Role/Time Load	34	34	4	4	4	14	17	4	4	4
Attitudes/Discrim.	24	22	7	6	5	18	20	3	3	3
Self-Attitudes	10	27	10	5	6	8	17	7	4	6
Parking	16	15	8	8	7	0	2			
Quality of Educ.	13	19	9	7	7	2	5			
Pos/Neg Experience	24	14	6	10	7	1	0			
Post-Graduate Goals/Experience	23	10	5	11	7	49	31	1	1	1
Counseling	7	15	11	8	11	6	14	8	7	8
Child Care	4	6		12		14	13	4	8	7
Miscellaneous	43	70				56	53			
Totals	337	366				224	236			

The first accompanying table (Table 30) presents the total number of responses in each category, the ranking of that category by each rater, and an overall ranking resulting from summing the individual rankings. Only categories receiving at least six different responses are contained in the rankings.

Some women raise questions, some make comments, and some do both. The redundancy is eliminated in Table 31 so no one is counted twice on one topic. The total number of non-overlapping items gives a more generalized picture of the frequency that each particular subject is mentioned by the different women writing replies. This overall ranking by topic without reference to whether questions are raised or commemts are given is more similar to the ranking of comments than to the ranking of questions.

Table 31 Non-Overlapping Open-Ended Responses by Categories

Category	Rater A		Rater B		Overall
	Total	Ranking	Total	Ranking	Ranking
Support	87	1	74	1	1
Role/Time Load	47	4	49	2	2
Scheduling	49	3	44	4	3
Finances	45	5	49	2	3
Post-Graduate Goals/Experience	68	2	40	6	5
Attitudes/Discrimination	40	6	38	7	6
Self-Attitudes	18	8	43	5	6
Child Care	18	8	19	10	8
Pos/Neg Experience	25	7	14	12	9
Counseling	11	12	26	8	10
Quality of Education	15	11	21	9	10
Parking	16	10	16	11	12
Miscellaneous	89		117		
Totals	528		550		

SUMMARY OF FREQUENCY DATA

Although the separate findings of the frequency data are important to note topic by topic, a summary of some of the more important findings is useful to review in one place before going on to further statistical analyses of the data. Such a summary is presented in Table 32.

It is interesting to compare findings in the literature to the findings in this study. Although the women in this study are not particularly different from those in the literature on age, they are less frequently married, are at the low end of the spectrum in whether they have children, and differ from the literature in main reasons to withdraw from college previously, reasons to return now, and, among current withdrawers, in reasons to leave now. Such comparisons are charted in Table 33.

Table 32 Frequency Data (n = 361)

Variable	Frequency
Student Status	53.7% graduates, 11.5% dropouts, 3.6% transfers 29.6% current students, 1.7% stopouts
Age	Mean = 34.55 Mode = 29 Median = 32.09
Marital Status	28.0% single, 50.4% married, 17.7% divorced, 2% widowed and separated
Have Children	56%
Income	Mean = $20,000 - $25,000 Mode = Over $40,000, next largest brackets = under $5,000 and $5,000 - $10,000.
Employment	28% not employed; others equally distributed across 1/4, 1/2, 3/4 and full-time employment
Prior Education	50 = previous degree; 212 = up to two years; 10% = no college; 50% = 3+ college entrances
Enrollment Rate	50% full-time, 38% part-time, 13% both
Income Adequacy	41% = Somewhat or very inadequate
Finances - Problem?	64.5% = yes, major or moderate problem
Previous Dropout	1. Lack of purpose/goal 2. Lack of money 3. Marriage 4. Having children Least: Lack friends' support; Acad. difficulty
Return Reasons	1. Personal satisfaction 2. Get a degree 3. Career change
Prior Crises/Changes	80% = Yes. 1/2 = Job Issue; 84% = severe
Resulting Crises/Ch	58.7% = Yes. Most = job. Split of mod., severe
Dropout Reasons Now	Overall: 1. Finances 2.(tie) Lack of time and Job responsibilities Dropouts: 1. Family responsibilities 2. Lack of time 3. Job responsibilities 4. Finances
Previous GPA	Mean = 3.01 Mode = 3.4 Median = 3.10
Cumulative GPA	Mean = 3.17. Higher than before = 59%. Lower than before = 16%
Last Term GPA	Mean = 3.42
Expect Degree, Without Break	75% = Yes. (g = 81%, w = 41%)* 14% = Mostly sure. (g = 13%, w = 28%)
Life Satisfaction in School	25% = Very satisfied (g = 23%, w = 26%) 59% = Mostly satisfied (g = 59%, w = 58%)
Happiness in School	19% = Very happy (g = 16%, w = 27%) 66% = Mostly happy (g = 66%, w = 62%)
Getting What One Wants in Life	33% = Very well (g = 40%, w = 24%) 55% = Adequately (g = 48%, w = 66%)
Cope with Crises	25% = Very well (g = 37%, w = 29%) 54% = Adequately (g = 55%, w = 50%)
Control of Own Life	17% = Complete (g = 21%, w = 20%) 71% = Much (g = 68%, w = 67%)

* g = graduates, w = withdrawers

Table 33 Literature Findings Compared to This Study

Variable	Literature	This study (n = 361)
Age		
Mean	early to mid-30's	34.55
Mode	upper 20's to near 30	29
Marital Status		
Single	5-25%	28%
Married	Normal 75-77%, low 58%	50.4%
Divorced	8-15%	17.7%
Having Children	50-90%	56%
Prior College Education	61-97%	89.4%
Employed	Most: at least 50%	72%
Spouse's Education	Less ed: More dropouts	Not significant
Previous Dropout Reasons		
Primary Reasons	Marriage/ family	Lack of Purpose/Goal
Secondary Reasons	Job/money	Money, marriage, family
Reasons for Return		
1.	Career (1980's)	Personal Satisfaction
2.	Personal Satisfaction	Get a Degree
3.		Career Change
Transitions	May contribute	80% report their role
Problems/Reasons to Leave		
1.	Finances	Family Responsibilities
2.	Scheduling	Lack Time
3.	Family	Job Responsibilities
4.	Time	Finances

FINDINGS ACROSS ALL STUDENT STATUS CATEGORIES

We already know a great deal about this population from these multiple observations of the frequencies with which various experiences, attributes, attitudes and accomplishments have occurred for these women. It is next important to go beyond studying frequencies to find the significant differences within this population.

SOCIODEMOGRAPHIC VARIABLES

It seems useful to first assess the broadest comparisons in this study by using all categories of student status. While the primary hypotheses of this study are based on comparisons of dropouts and persisters, it is also valuable to look at <u>all</u> the subjects including the more than one-third who are omitted from other analyses. These total analyses help to understand first, whether either or both dropouts and graduates differ from students as a whole and second, whether more or fewer associations are significant across all student status categories compared to the two criterion groups of our hypotheses.

The variables of age, marital status, income and whether or not a woman is a parent are not found to be significant, although a relationship exists between the number of children per mother and student status ($p=.036$). Current student mothers have slightly more and dropouts slightly fewer children per mother than the average in the study. When looking at children by age groupings, no relationship exists across all student status categories of how many have preschoolers or have children beyond high school age, but the relative

proportions of those having school age children do differ (p=.014). Graduates are somewhat more likely to have more school age children than expected. None of these differences are significant using only the two criterion groups.

These associations on children which are significant are, however, rather weak, which means that they do not very reliably predict group membership nor do they predict a very large share of the variance. In fact, although many associations are found to be significant, most are weak associations. Therefore, only the few strong associations will be reported from hence forward.

The number of hours of employment per week while a student differ (p=.029). One third of current students and one-quarter of graduates and of withdrawers say they have not worked in their last three terms of school. Transfers mostly worked half-time to over full-time; graduates averaged about eleven to twenty hours of work if they worked; working withdrawers averaged 31 to 40 hours weekly work, and employed current students average 21 to 30 hours of employment weekly.

Table 34 Sociodemographic Variables by Student Status

Sociodemographic Variable	X2: p=
Age	.925 (ns)
Marital Status	.958 (ns)
Having Children	.184 (ns)
Number of Children	.036
Ages of Children	
0-5 years	.684 (ns)
6-18 years	.014
19+ years	.051 (ns)
Income	.082 (ns)
Income Adequacy	.105 (ns)
Financial Problem?	.243 (ns)
Hours Worked	.029

PERCEPTIONS ABOUT INCOME

No relationships are found across categories of student status about the women's perceptions of the adequacy of their income nor about whether finances have been a problem during school. However, some other comparisons are quite revealing. Self-perceived adequacy of income compared to actual income and also compared to whether finances were seen as a problem during school are significant beyond the p=.0001 level and show quite strong associations, as might be expected. Despite this rather predictable finding, not all cells are that predictable. Some women with incomes under $5,000 see their income as adequate, and some with incomes of $40,000 or more see that as inadequate.

Adequacy of income compared to the number of hours worked also shows a very significant relationship at the p=.0001 level, with those not being employed at all finding their income to be the most adequate. Forty-four percent of those saying their income is very adequate are not employed. Interestingly, those who experienced their income as being very inadequate are primarily also not employed at all or are employed up to twenty hours per week. Those who found their income to be inadequate are very evenly scattered across the categories of number of hours worked. Those working eleven to twenty hours or over thirty-one hours generally found their income to be adequate.

EDUCATIONAL VARIABLES

The enrollment status of students (whether they attended full-time, part-time, or both during their last three terms) is

significant at the p=.000 level. Dropouts, stopouts and transfers all are at least twice as likely to attend part-time than full time while graduates are more than twice as likely to attend full-time as part-time. No significant relationship is evident between student status and whether or not a previous degree is possessed or the amoung of previous education.

A large majority of all groups except dropouts were very sure they would get a degree without further breaks, including stopouts. Only forty percent of dropouts had such an expectation. The relationship of this expectation to student status is highly significant (p=.0003).

The level of spouses' education for married students across all status categories is significantly related (p=.015) with graduates' spouses being the most likely to have some college education, current enrollees' spouses are most likely to have Bachelor's degrees, and dropouts' spouses being most likely to have Bachelor's degrees. Graduates are more likely than any other group to have spouses with advanced degrees, although they also have the largest proportion of spouses with a high school education only.

RELATIONSHIPS BETWEEN SELECTED SOCIODEMOGRAPHIC AND EDUCATIONAL VARIABLES

No relationship exists between level of income and the amount of spouses' education. In fact, there is a noticeable similarity of income spread across all categories of spouses' educatioal level for married women. There also is no relationship between adequacy of

income and a woman's number of years of education prior to the present schooling.

A highly significant and strongly associated relationship (p=.0000) exists between annual income and marital status. Of the never marrieds (to be called "singles" hereafter), 38.6% had incomes under $5,000 and 61.2% had incomes under $10,000 while in school. Incomes at or above $40,000 are reported by 33.5% of the marrieds, 6.2% of the divorced and 3.0% of the singles. The most frequent income among divorcees is $5,000 to $9,999, followed by income under $5,000. The second most frequent income for the marrieds is $30,000 to $34,999, with the next higher bracket of $35,000 to $39,999 being in third place.

Table 35 Income by Marital Status

Annual Income $	Marital Status: Never Married n	row %	Married n	row %	Separated n	row %	Divorced n	row %	Widowed n	row %
0 - 4,999	39	62.9	8	12.9	0		14	22.6	1	1.6
5,000 - 9,999	23	41.8	10	18.2	1	1.8	21	32.3	0	
10,000 - 14,999	13	46.4	11	39.3	0		4	14.3	0	
15.000 - 19,999	10	41.7	10	41.7	0		4	16.7	0	
20,000 - 24,999	3	9.1	18	54.5	1	3.0	11	33.3	0	
25,000 - 29,999	5	19.2	14	53.8	2	7.7	4	15.4	1	3.8
30,000 - 34,999	4	11.8	26	76.5	1	2.9	3	8.8	0	
35,000 - 39,999	1	4.3	22	95.7	0		0		0	
40,000+	3	4.5	60	89.6	0		4	6.0	0	
Total	101		179		5		65		2	

Chi Square: p = .0000

CAUSES OF EARLIER WITHDRAWAL

No association is found between any of the reasons people left college before age twenty-five and the variable of student status except for the one association of having left due to a lack of money (p=.017). Stop-outs are the group marking this response in the highest proportions. Approximately 44% of both graduates and current enrollees cite the lack of money as having previously contributed to their dropping out, but it is only cited by 34% of present withdrawers and eight percent of transferees.

CHANGES OR CRISES

A comparison across groups on changes or crises which contributed to women's return to school reveals a relationship on the crises or changes of family (p=.003) and personal problems (p=.026). Whether these crises or changes are perceived as being positive or negative is generally not known, although a few subjects comment on that in the margin.

On changes or crises occurring <u>after</u> returning to school, a very strong association is found across groups on the issue of health (p=.0002). A change or crisis of family member status is also significant (p=.019), although this relationship is curvilinear. No other changes or crises are significant across all groups.

REASONS FOR CURRENT EDUCATION

Only one of the reasons for having returned this time is significant across categories of student status: to prepare for a job (p=.003). Fifty-three to fifty-six percent of current enrollees and graduates returned to prepare for a job, and 31% of transferees, 24%

of dropouts and 50% of stop-outs returned for that purpose. No other reasons for return nor clustered summaries of reasons are significant across all groups.

REASONS FOR WITHDRAWAL NOW

An interesting difference from the other previously cited sets of responses where one or several applicable reasons can be indicated is found by statistical analysis when looking at the reasons people have withdrawn or contemplate(d) withdrawing: Of the twenty-one possible reasons given for withdrawal, nearly all are significantly related to the variable of student status.

Highly significant associations ($p=.0000$) are found for the reasons of family responsibilities, job responsibilities, too many roles, not enough time, lack of classes or programs wanted, finances, scheduling problems, and a category of other unspecified reasons. Other significant associations are in problems with faculty ($p=.0001$), lack of family support, needing a break or change and in personal problems (all at $p=.01$). Other reasons showing a significant association are personal health and lack of interest (both at $p=.05$). It is noteworthy that this is the only set of chi square analyses where the majority of items show a significant level of association across all categories of student status.

ACADEMIC ACHIEVEMENT

No academic achievement variables are significantly related across categories of student status.

PSYCHOLOGICAL ADJUSTMENT

The only relationship across all categories of student status with any of the measures of psychological adjustment is how well the student sees herself as getting the things she wants out of life (p=.006). Approximately forty percent of graduates and transfers and 23% of current enrollees and dropouts say they accomplish this very well. Transfers and stopouts are the two groups who have larger percentages who do not think they are doing very well on this dimension (approximately 16% each).

COMPARISONS BY MARITAL STATUS

Because a visual scan of the data seems to reveal major differences by whether women are single, married or divorced, each of these categories is treated separately by creating dummy variables. This allows testing of significance on separate sets of groups which now include the singles as compared to all of the rest of the respondents who are here called the non-singles, the married compared to all of those not married, and the divorced compared to all who are not divorced. Fewer significant relationships are found when comparing the divorced with the not divorced categories using all responders than are found for married/not married and single/not single comparisons.

Divorced students show a bulge in the age range between thirty and thirty-four years old. Single women compared to non-single women in the study (non-single includes divorced, widowed and separated as well as married women) are younger than non-singles (p=.0000) and married women are older than non-married women (p=.0004).

The singles and divorcees find their income less adequate than non-singles and non-divorcees do while marrieds consider their income to be more adequate than do non-marrieds (p=.000 for all three). This finding parallels the finding that income is lower for single and divorced women than for married women in the study. Both singles and divorcees experienced financial problems more often than non-singles and non-divorcees and the married women experienced fewer financial problems than their counterparts (all: p=.000). Both single and divorced women worked more hours per week than their opposite groups (p=.05) while married women are much less likely to work as many hours weekly as do non-marrieds (p=.000).

Single women are more often full-time students than all categories of non-single women (p=.01). Married women are less often full-time students than are non-married women (p=.01). Singles accumulated more education prior to this entry to school (p=.05) and give fewer reasons for previous dropping out than non-singles (p=.01). Divorced women give more reasons for withdrawal the previous time than do those who have never divorced (p=.000). Married women list fewer reasons for recent return (p=.050) than do non-married women.

The cumulative GPA is lower for singles than for non-singles (p=.05), higher for marrieds than for non-marrieds (p=.01) and almost exactly equal for divorcees and non-divorcees. Divorced women claim a comparatively poorer GPA now than they had in the past (p=.05).

On the psychological adjustment factors, several are significant when examined by the discrete marital groups. Singles were less satisfied during school than non-singles (p=.05) and marrieds claim

Table 36 All Subjects by Marital Status

Variable	Single/ Not Single	Married/ Not Married	Divorced/ Not Divorced
t:	p=	p=	p=
Age	.000	.000	.069 (ns)
Having Children	.000	.000	.068 (ns)
Number of Children	.000	.000	.337 (ns)
Income	.000	.000	.000
Income Adequacy	.000	.000	.000
Financial Problem?	.000	.000	.000
Hours Employed	.037	.000	.047
Enrollment Status	.002	.008	.772 (ns)
Years of Pre-entry Education	.048	.196 (ns)	.829 (ns)
# Reasons for Previous Withdrawal	.003	.613 (ns)	.000
# Reasons for Return	.243 (ns)	.050	.323 (ns)
Cumulative GPA	.015	.006	.948 (ns)
Present GPA Minus Previous GPA	.713 (ns)	.349 (ns)	.038
Life Satisfaction During School	.012	.002	.496 (ns)
Life Satisfaction Since School	.251 (ns)	.002	.045
Happiness During School	.005	.000	.715 (ns)
Getting What Is Wanted In Life	.005	.000	.163 (ns)
Self-Esteem	.006	.079 (ns)	.040
Locus of Control	.197 (ns)	.981 (ns)	.217 (ns)
Expect Degree Without Break?	.366 (ns)	.642 (ns)	.945 (ns)

more satisfaction both then and since leaving school than all non-marrieds (both p=.01). Divorced women have been less satisfied since leaving school (p=.05) but have higher self-esteem (p=.05) than non-divorced women. Single women found less happiness during school (p=.01), have more difficulty getting what they want from life (p=.01) and have poorer self-esteem (p=.01) than is true for non-single women. Married women experienced more happiness during school (p=.01) and are more able to get what they want out of life (p=.000)than non-married women.

The most striking noticable relationships among these dummy variables is that married women are consistently better adjusted and less likely to be full-time students than non-married women and single women are apparently somewhat less well-adjusted and more likely to be full-time students than non-single women. Divorced women are rather heterogeneous, particularly on psychological adjustment variables.

When tested using analysis of variance by marital status, self-esteem is significant at the .002 level but locus of control is not found to be significant. The cumulative GPA differs at p=.02, but the last one-term GPA does not differ.

COMPARISONS OF DROPOUTS AND PERSISTERS

When using only the two criterion groups of persisters to graduation and withdrawers and ignoring those in the other categories of student status, somewhat different patterns emerge.

SOCIODEMOGRAPHIC VARIABLES

The graduates and dropouts are not significantly related (or significantly different) on any of the sociodemographic variables except income (p=.025) and hours of employment per week (p=.000). Somewhat surprisingly, family income is higher for dropouts than for graduates, and withdrawers also report more hours per week of employment.

Although income is not significant across all students, perceptions about it are. A test on the adequacy of income for dropouts and persisters is significant (p=.014) but turns out to be in the opposite direction from what was expected. The graduates report their incomes as being less adequate than do the dropouts. Furthermore, the question of whether finances had been a problem during college is significant (p=.003) with the graduates reporting more of a problem with finances than those who withdrew. These comparisons are highly intriguing. There is no relationship between adequacy of income and a woman's number of years of education prior to the present schooling.

EDUCATIONAL VARIABLES

On the educational dimensions, the rate of recent college attendance is significant (p=.0000) with a majority of the withdrawers having attended part-time while graduates were much more likely to have attended full-time. Withdrawers had more education prior to this entry to school than did graduates (p=.047). Withdrawers are also more likely than graduates to have achieved a previous degree

(p=.0097). Neither of these last two differences are significant across all student categories.

Primary Hypothesis 2 of this study states that graduates would be more likely to have planned on completing a degree without breaks than would dropouts. This is supported very strongly at the p=.000 level.

No differences between dropouts and graduates emerge by the level of spouses' education, contrary to what the literature would suggest and different from the earlier analysis on all categories of student status. A comparison is made of those whose spouses have only high school education with those whose spouses have doctorates, since this variable might determine the amount and adequacy of income. The students with husbands in these two extreme educational categories do not differ on their perceptions of the adequacy of income or on the actual income itself, nor do these wives differ in the hours per week of employment, although those whose spouses have a high school education did find finances to be more of a problem than those whose spouses had a doctorate (p=.038).

CAUSES FOR PREVIOUS NON-COMPLETION OF EDUCATION

Graduates and dropouts do not differ on the rate they indicate any specific causes for earlier non-completion of college nor do they differ on the total number of reasons claimed for earlier non-completion.

CRISES/CHANGES

Graduates mark a higher total of crises or changes contributing to their return (p=.035) and more recent crises since returning to school (p=.026) than do withdrawers.

These criterion groups are significantly related on the same two changes or crises preceding the return to education as are found across all categories of student status: Changes or crises in the family (n=31, withdrawers (w)=3, p=.02) and those called "personal problems" (n=26, w=3, p=.019) are marked more often by graduates than by withdrawers. Unlike findings on all students, no significant relationships are found between the criterion groups on changes or crises resulting from the return to school.

REASONS FOR REENTRY

The fact that graduates have a longer list of reasons for reentry than do dropouts is very highly significant (p=.000). These graduates particularly have a longer set of career related reasons for return than do dropouts (p=.05).

As when making comparisons by all student status groups, only one of the specific reasons for entering college now, to prepare for a job, shows a significant relationship to the criterion groups (n=118, w=9, p=.0005). But on this one variable, the significance level is higher when the comparisons are made only between these two groups than when the comparisons were made across all student status groups.

RECENT REASONS FOR WITHDRAWAL

Again, several significant relationships on reasons for recently anticipated or completed withdrawal emerge, although not as many as when compared across all levels of student status. Family responsibilities, job responsibilities, and lack of time are all significant at the p=.0000 level. Other significant relationships to the criterion groups are found for finances (p=.0003), too many roles (p=.0006), personal problems, (p=.0066), personal health (p=.0124),

scheduling problems (p=.00170) and other unspecified problems (p=.0007). Withdrawers indicate problems more frequently in all these areas than do graduates.

The withdrawers cite more reasons per person than the graduates do for having withdrawn (p=.000), although this may be because they have given more thought to why they left as well as for other reasons cited above.

ACADEMIC ACHIEVEMENT

Primary Hypotheses 3a and 3b predicted that graduates would have higher cumulative and recent grade point averages than withdrawers. Recent academic achievement proves to be a more important discriminator than historic academic achievement. The GPA's achieved prior to this last entry to college are not significantly different. However, now that they have accumulated more recent grades (which are combined with their former records if they previously attended Michigan State University and are calculated independently of previous GPA's if they went to college elsewhere previously), cumulative GPA's differ. One-tailed tests show that graduates have higher cumulative GPA's than do withdrawers (p=.010). Graduates also have higher recent one-term GPA's than withdrawers have (p=.030).

PSYCHOLOGICAL ADJUSTMENT

In general, primary Hypothesis 1 on psychological adjustment cannot be supported by itself. No significant differences are found on life satisfaction as a whole while they were in school nor on life satisfaction as a whole after they left school, contrary to expectation. Although happiness while in school shows a significant difference (p=.05), the direction is other than what was predicted:

Withdrawers report having been happier while in school than do graduates. As predicted, graduates feel they can better cope with and/or handle crises ($p=.05$) than do dropouts. No significant differences are found on getting what they want out of life nor on a single item self-assessment of locus of control. Neither the Locus of Control scale nor the Self Esteem scale differentiate between dropouts and graduates. All of these tests are one-tailed.

After using factor analysis with varimax rotation to analyze all items of psychological adjustment including the individual items within the locus of control and self esteem batteries as well as the single items of adjustment, four factors are found. Primarily but not exclusively, these factors and their coefficient alpha estimates of reliability are:

Factor 1: Twenty-one of the 28 items in the Duttweiler's Locus of Control scale (.83). Weightings on Factor 1 range from 56 to 24. All except two items, items #1 and #17 of question #24 on the questionnaire, clearly weight much more heavily on Factor 1 than on any other factor. Both Item #1 and Item #17 of question #24 items are nearly as heavily weighted on the second Locus of Control factor, Factor 2. Item #17 is not very intercorrelated with other items in either Factor 1 or Factor 2 and weights lightly on the other factors. This item is not included in the four factors. Item #1 is more uniformly correlated with Factor 1 and is retained in it. Factor 1 could be considered a self-reliance or belief in self factor.

Factor 2: Five items in the Locus of Control scale (.82). These items have a common thread of self-assessment of one's role in a group. Three items weight very heavily on Factor 2 (72 to 51) and

very lightly elsewhere. Item #23 weights moderately heavily on Factor 2 (41) and almost as heavily on Factor 1 (38). Item #3 weights proportionately the same as item #23 (29 on Factor 2 and 26 on Factor 1). Both items are retained in Factor 2.

These items in Factors 1 and 2 are more clearly interrelated than related to other items in the other factors.

Factor 3: All ten items on Rosenberg's Self-Esteem scale plus one item, item #12 of question #24, from the Locus of Control scale (.69). Weightings range from 74 to 33 with the highest factor loading on any other factor being 25. This can be considered a self-esteem factor.

Factor 4: The six single items of adjustment (.73). These are the items assessing life satisfaction during and since college, happiness during college, how well persons are getting the things they want in life, ability to cope with or handle crises, and a self-assessment of locus of control (questions #17, 18, 20 to 23 on the questionnaire) . Factor loadings range from 70 to 22. The weakest loadings on this factor are for the question on coping with crises. This item is, in fact, the only item which is not placed on the factor where it loaded most heavily (Factor 3). In all other varimax rotations it belonged with items from Factor 4, and an examination of the total correlation matrix reveals its most consistent correlations are with Factor 4 items.

Factor 1 accounts for 10% of the total variance, Factor 2 for 5%, Factor 3 for 9% and Factor 4 for 5% of the total variance in the population.

Of these, only the first factor on the locus of control scale, which is here called a self-belief or self-reliance factor, shows a more internal score for graduates (p=.05). No other factors show significant differences.

Table 37 Psychological Adjustment by Graduates and Withdrawers*

Adjustment Variable	One-tailed t: p=
Life Satisfaction During School	.438 (ns)
Life Satisfaction Since School	.234 (ns)
Happiness During School	-.041
Getting What Is Wanted in Life	.094 (ns)
Coping With Crises	.044
Control of Own Life	.305 (ns)
Analysis of Variance:	**p=**
Locus of Control	.075 (ns)
Self-Esteem	.057 (ns)
Factor 1 (Locus of Control 1, Self-Reliance)	.034
Factor 2 (Locus of Control 2, Role in Group)	.355 (ns)
Factor 3 (Self- Esteem)	.486 (ns)
Factor 4 (Adjustment)	.096 (ns)

* Positive probability means graduates score more positively

COMPARISONS OF FINDINGS ON ALL SUBJECTS TO THOSE ON CRITERION GROUPS

It is instructive to compare findings on all subjects with those of only dropouts and persisters. Some findings are significant across all groups of subjects by student status but are not significant when comparing only graduates to dropouts and vice versa. When findings are significant in both analyses, the strength of the significance also often varies. Furthermore, among all subjects, dropouts appear to stand out from the rest more than do graduates. These comparisons are most easily seen in tabular form in Table 38.

Table 38 Findings on All Subjects and on Criterion Groups*

Variable	All Subjects** (n=361)	Criterion Members*** (n=232)
Age	ns	ns
Marital Status	ns	ns
Having Children	ns	ns
Number of Children	.036 (c) [d]	ns
Number of School-age Children	.02 (c,g)[d]	ns
Level of Spouse's Education	.015	ns
Years of Previous Education	ns	.047 (d)
Income	ns	.025 (d)
Adequacy of Income	ns	.014 (d)
Is income a problem?	ns	.003 (g)
Hours of Employment Weekly	.029 (d,s)	.000 (d)
Enrollment Rate	.000 (g)[d,s,t]	.000 (g)
Reason for Previous Dropout		
Family	ns	.020 (g)
Personal Problems	ns	.019 (g)
Money	.017 (s)[d,t]	ns
Total Number of Reasons for Previous Dropout	.03	ns
Change/Crisis Contributing to Return		
Family	.003	.02 (g)
Personal Problems	.026	.019 (g)
Total Number of Contributing Changes/Crises	ns	.035 (g)
Change/Crisis Resulting from Return		
Health	.0002	ns
Family Member Status	.019	ns
Total Number of Resulting Changes/Crises	ns	.026 (g)
Return to Prepare for a Job	.003	.0005 (g)
Career Reasons for Return	ns	.05 (g)
Total Number of Reasons for Return	ns	.000 (g)
Expect Degree with No Further Breaks	.0003 [d]	.000 (g)
Happiness During School	ns	.05 (d)
Getting What Is Wanted in Life	.006 (g)	ns
Ability to Cope with/Handle Crises	ns	.05 (g)
Possess Previous Degree	ns	.0097 (d)
Cumulative GPA	ns	.010 (g)
Recent GPA	ns	.030 (g)
Difference of Recent and Cumulative GPA	ns	.0001 (g)

* g = Graduate, d = Dropout, t = Transfer, s = Stopout, c = Current Student

** ( ) = Higher and [ ] = Lower than Group Average

*** ( ) = Higher than Comparison Group

COMPARISONS BY MARITAL STATUS

The previously described dummy variables on marital status are each used to compare those who have graduated or withdrawn. Singles include 30% of the graduates and 16% of the dropouts, a difference which is significant (p=.044). Married women include 47% of the graduates and 63% of the dropouts. Nineteen percent of the graduates and 21% of the dropouts are divorced.

Three separate and parallel sets of analyses using the three categories of marital status highlight a number of significant differences. Singles are younger than non-singles (p=.0000) and marrieds are older than non-marrieds (p=.0006). Household income during school was higher for married students than for those non-married while in school (p=.0000),lower for singles than for non-singles (p=.000) and lower for divorcees than for non-divorcees (p=.0028). No comparisons show differences on years of previous education nor expectations of completing a degree without further breaks. Married women worked less than non-married women (p=.0025) and single women worked more than non-single women (p=.0024).

ANALYSES BY MARITAL STATUS AND PERSISTER/WITHDRAWER STATUS

A very useful examination of dropouts and persisters is to look at single women who graduate versus single women who withdraw, married graduates versus married withdrawers and divorced graduates versus divorced dropouts. This analysis sharpens awareness of what has already been found: the marital status of women in this study is an important variable.

No significant differences are found on any of the income variables when comparing married graduates with married dropouts and

single graduates with single dropouts. More single (p=.004) and married (p=.007) but not divorced women graduates expected to get a degree than comparable women among the withdrawers (f: p=.01). The divorced withdrawers claim significantly more income (p=.037) and more adequacy of income (p=.040) than do divorced graduates. Income was less a problem during schooling for divorced withdrawers than for divorced graduates (p=.020).

Married dropouts report more hours per week of employment during school than do married dropouts (p=.028), but no patterns of difference are found among singles nor among divorcees.

Across all categories of single, married, and divorced status, graduates were much more likely to attend full-time than were those who withdrew. (Single and divorced: p=.003, married: p=.039).

Single graduates report more life satisfaction during school than the single withdrawers (p=.036), but the categories are reversed when the single withdrawers report more life satisfaction since leaving school than do single graduates (p=.050). Married (p=.017) and divorced (p=.029) graduates both are more able to get what they want out of life than married and divorced women who dropped out, and graduated divorcees report being more able to cope with crises than do withdrawn divorcees (p=.030). Both married (p=.026) and divorced (p=.024) graduates have higher self-esteem than their withdrawer counterparts.

The married graduates score higher (or more internally) than do married dropouts on Factor 1 of the Locus of Control Scale (p=.046). Divorced graduates rank higher on Factor 3 or the self-esteem factor (p=.034) than do their withdrawer counterparts. Analysis of variance

shows the married/nonmarried difference between criterion groups on the six individual items of psychological adjustment taken together as Factor 4 is highly significant (p=.001).

Table 39 Dropouts Compared to Persisters Within Marital Status

Variable	Single Graduates/ Dropouts t: p=	Married Graduates/ Dropouts p=	Divorced Graduates/ Dropouts p=
Number of Children		.225 (ns)	.355 (ns)
Income	.551 (ns)	.799 (ns)	.037
Income Adequacy	.549 (ns)	.374 (ns)	.040
Financial Problem?	.409 (ns)	.439 (ns)	.020
Hours Employed	.065 (ns)	.028	.173 (ns)
Enrollment Status	.003	.039	.003
Years of Pre-Entry Education	.769 (ns)	.684 (ns)	.241 (ns)
Cumulative GPA	.222 (ns)	.286 (ns)	.082 (ns)
Last One-Term GPA	.144 (ns)	.140 (ns)	.385 (ns)
Expect Degree Without Breaks	.004	.007	.057 (ns)
Life Satisfaction During School	.036	.486 (ns)	.250 (ns)
Life Satisfaction Since School	.050	.036	.143 (ns)
Happiness During School	.280 (ns)	.090 (ns)	.142 (ns)
Getting What Is Wanted In Life	.070 (ns)	.017	.029
Cope with Crises	.148 (ns)	.367 (ns)	.030
Self-Esteem	.128 (ns)	.026	.024
Locus of Control	.317 (ns)	.059 (ns)	.159 (ns)

TWO-WAY ANALYSES OF VARIANCE BY MARITAL STATUS AND CRITERION GROUPS

Because of the previously noted differences by marital status, a set of comparisons are made between the dropouts and the graduates using marital status as a second independent variable. At this point differences not previously visible emerge. Among sociodemographic variables, age shows a main effect, effects by marital status and an overall significance. Annual income has a main effect as well as an effect for marital status and an interaction effect. Overall income differences are highly significant. The hours of employment per woman

have a main effect, effects for both criterion group membership and marital status and an overall significance.

Of the educational variables, the expectation of a degree evidences an overall effect, an effect by criterion groups and an overall strong significance. Enrollment status shows a main effect, an effect for criterion groups, and an overall effect.

Several results are of interest on the psychological adjustment variables. Significant main effects and a significant effect for marital status are found for life satisfaction during and since school, happiness during school, and getting what is wanted out of life. Two of these have a significant interaction: life satisfaction since school and getting what is wanted out of life. Most of these findings are significant at the $p=.01$ level overall. Coping with crises shows a significant effect for the dropout/graduate category. The self esteem scale shows no main or individual effects but is significant overall. The locus of control scale shows no significant effects at all, but the adjustment scale (Factor 4) which is primarily a combination of the individual psychological items outside the batteries (satisfaction, happiness, coping with crises, getting what is wanted out of life, and self-assessment of locus of control) shows a main effect, significant effects for marital status and overall significance.

Academically, the cumulative GPA is a significant variable overall and has both a main effect and effects for both criterion groups and for marital status. The most recent one-term GPA does not have a main effect but does show a significant effect by criterion groups.

Table 40 ANOVA Using Graduates/Withdrawers and Marital Status

Variable	Main Effects	Criterion Groups	Marital Status	Interaction Effects	Explained
			Significance of f =		
Age	.001	.443 (ns)	.001	.700 (ns)	.001
Income	.001	.150 (ns)	.001	.018	.001
Hours Employed	.001	.002	.021	.916 (ns)	.008
Enrollment Status	.001	.001	.198 (ns)	.246 (ns)	.001
Expectation of Degree	.001	.001	.549 (ns)	.246 (ns)	.001
Cumulative GPA	.002	.002	.029	.854 (ns)	.011
Recent One-Term GPA	.137 (ns)	.023	.818 (ns)	.836 (ns)	.316
Life Satisfaction During School	.013	.679 (ns)	.005 (ns)	.163 (ns)	.014
Life Satisfaction Since School	.016	.318 (ns)	.008	.040	.005
Happiness During School	.002	.187 (ns)	.003	.420 (ns)	.007
Getting What is Wanted Out of Life	.003	.063 (ns)	.003	.021	.001
Coping with Crises	.244 (ns)	.045	.977 (ns)	.512 (ns)	.357 (ns)
Control of Own Life	.713 (ns)	.574 (ns)	.586 (ns)	.444 (ns)	.700 (ns)
Locus of Control Scale	.143 (ns)	.127 (ns)	.180 (ns)	.495 (ns)	.233 (ns)
Self-Esteem Scale	.108 (ns)	.055 (ns)	.227 (ns)	.070 (ns)	.046
Factor 4 (Adjustment)	.004	.083 (ns)	.004	.769 (ns)	.018

All of these effects underline the importance of having analyzed several variables using both marital status and the criterion groups as independent variables, since marital status seems to have as much or more effect as any other one criterion on other variables.

CORRELATIONS OF PSYCHOLOGICAL ADJUSTMENT VARIABLES

The secondary Hypothesis 1 stated that the measures of psychological adjustment would be highly correlated with each other. Every correlation except one (self-esteem scale with happiness during school) is significant. Of those which show a significant correlation, the strength of that correlation is examined. Several of the psychological variables are moderately correlated with each other, and all have stronger and weaker correlations with various other psychological variables. The strongest relationships are between happiness during school and satisfaction during school (.66), satisfaction since school and the ability to get what is wanted in life (.60), locus of control and self-esteem (.51), ability to get what is wanted in life and self-esteem (.48), and the ability to handle crises and self-esteem (.47). Rather surprisingly, although the single-item locus of control question and the locus of control scale are significantly related, the correlation is only mild (.21).

Those items which moderately correlate with several other items (such as self-esteem) are found to be less useful in the better discriminant functions because of that degree of overlap with other useful variables. Some of those variables which are not significant alone but which correlate less strongly with other variables (such as

locus of control) are more useful in the discriminant function because they tap less overlapping areas for discrimination.

Table 41 Correlation Matrix of Significantly Related Psychological Adjustment Variables

Psychological Variable	1	2	3	4	5	6	7	8
1. Satisfaction During School		.23	.66	.33	.14	.21	.17	.27
2. Satisfaction Since School	.23		.18	.60	.23	.38	.15	.43
3. Happiness	.66	.18.		.27	.12	.24	.18.	ns.
4. Getting Things in Life	.33	.60	.27		.34	.42	.19	.48
5. Cope/Handle Crises	.14	.23	.12	.34		.38	.32	.47
6. Self-Assessed Locus of Control	.21	.38.	.24	.42	.38		.21	.39
7. Locus of Control Scale	.17	.15	.18	.19	.32	.21		.51
8. Self-Esteem Scale	.27	.43	ns.	.48	.47	.39	.51	

The hypothesis that these adjustment items are correlated with each other is supported by the near uniformity of significant correlations, but they correlate mildly to moderately rather than as highly as hypothesized.

DISCRIMINANT FUNCTION ANALYSIS

Several equations combining different sets of variables discriminate quite well (near or above 80% accuracy) within the randomly assigned groups (A and B) which each contain a split half of the dropouts and of the persisters. Three final equations are formed to test the predictive ability of the equation and to use for further predictions.

The formula found to best discriminate the first group, group A, can sort 83.62% of the 116 subjects in that group accurately into categories of dropout or persister. When the same equation is used to classify group B, it accurately identifies 84.48% of that group. It also classifies accurately 81.47% of the total pool of dropouts and persisters but is more accurate in identifying graduates in group B and identifying dropouts in the total pool.

The formula found to best discriminate between dropouts and persisters in group B can sort 87.07% of that group accurately. When used to classify members of group A, this equation's classification accuracy is 80.17%. It places 80.17% of the total pool into the proper groups.

The formulas found useful for discriminating the entire pool of dropouts and persisters are generally somewhat longer and somewhat less accurate than those found useful in the subgroups. However, one ten-item formula correctly identifies 83.62% of the criterion group membership of the total pool and then correctly classifies 86.21% of group A and 83.62% of group B. Each of these items, when weighted by its unstandardized canonical discriminant analysis coefficient (generated by the computer program) is added to the other weighted items to arrive at a total score. When these total scores are then used for all members of the pool and the results are tested for statistical significance by analysis of variance, this formula is found to be significant at the $p=.005$ level and the separate formulae which best identify groups A and B are each found to be significant when tested on the pooled criterion groups at $p=.001$.

This formula uses the following variables with the order in which they are listed indicating the relative importance in the formula of that item's predictive power:

	Multiplier for weighting*
Expectation of completing the bachelor's degree without further breaks	.77
Total number of reasons given for last entry into college	-.35
Happiness during school	-.70
Presence of a previous degree	.99
Assessment of how well one is getting the things wanted out of life	.44
Hours per week of employment	.17
Whether finances are a problem	.23
Cumulative GPA	-.39
Locus of control scale score	.91
Single/nonsingle status	-.43
(Constant)	+2.02

*Positive weights mean graduates' scores are lower on the question as worded on this questionnaire. They are also more often single than non-single.

This equation predicts that of the 107 current students in the study, 74 are likely to graduate and 33 are likely to withdraw. The program has generated a list of case numbers showing exactly which subjects are predicted to be in those two different groups.

This cross validation study thus shows it is possible to find a combination of variables which, taken together, rather accurately predict whether undergraduate women will persist to graduation or will drop out without a degree. Each of the formulae which discriminate one subgroup can be used on the other randomly selected subgroup with a reasonably high degree of accuracy.

All of the better equations use a rather consistent minimum pattern of types of information: 1) Some combination of psychological variables, 2) Some form of assessment of academic achievement, 3) The

number of reasons cited for reentering college, 4) Whether or not a previous degree is held, and 5) One or both of the items assessing use of time by the rate of enrollment and/or hours of employment. Some of these equations also use the perception of whether finances were a problem and/or single or married status.

SUMMARY

This study has found a wide variety of variables which are useful in understanding how to describe this population of undergraduate women at Michigan State University. More importantly, a very useful set of variables, used alone and in combinations, do significantly identify differences and relationships between these women who continue their education to a bachelor's degree and those who drop out of the university without a degree.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

Outcomes in this study weave fascinating patterns. First, the response rate is rather high considering that the population sampled was defined and addresses were frozen nearly two years before contact was initiated. For the approximately 165 responses received in the first two weeks, addresses given now were compared to a those in a student directory from September, 1984. Approximately one-fourth of those giving addresses have moved, yet were reached and responded. Some also indicate a name change during this period. Even if undeliverable surveys are counted, a good-sized 57% of the entire sample drawn replied. Although any dropoff from a 100% return leaves less explained in a study, it is useful to gain information on five-eighths of the women who actually were reached.

The responses include a remarkably high number of graduates considering the assumptions which were made by anyone consulted on campus prior to the survey being conducted. In fact, this would have been a relatively high number even if the entire sample had responded to the survey. And it is exciting to have as large a group as more than forty withdrawers respond.

LIMITATIONS OF THE STUDY

RETROSPECTIVE DATA

It is important in reviewing these findings to recognize this study's limitations. As cited in the opening chapter, the retrospective nature of this survey may color the responses given. We

do not know whether the withdrawers choose to paint themselves in a rosier light than is accurate. We do not know whether persisters, simply because they know they have successfully completed their degrees, may see things as being more positive as they look back than they would have seen them while they were in the midst of the educational process.

Even though it is impossible to know the effects of the retrospective viewpoint from which these respondents are operating, it is still significant that many differences exist between the two groups, and that these differences are not all necessarily in the direction predicted nor are they all in a similar direction. It is particularly noteworthy that the dropouts expressed more happiness during school while the graduates expressed more satisfaction. That may be a rather accurate presentation of the difference between persisters feeling satisfied with what they did and their accomplishments while in school despite whatever else was going on in their lives versus those who did not complete an education and therefore had less with which to be satisfied still perhaps enjoying life while they were in school.

Although retrospective studies have limitations, the limitations will be the same in any autopsy (after-the-fact) study.

SETTING OF THE STUDY

The setting of this study in a large public university in a small midwestern city limits generalizations. It may help us understand more about older undergraduate women, but caution must be used in extrapolating results from this study and applying them in another setting, whether that setting differs geographically, in size, or in

type of educational institution (community or four-year college or university, public or private).

UNKNOWN MAKEUP OF POPULATION

A further limitation is the fact that we do not know who makes up the entire pool from which this sample is drawn. Therefore we do not know what portion of the dropouts or of the graduates or of the other categories truly exist in the population. We can hypothesize that there is a higher response rate from graduates and that withdrawers are underrepresented, but we cannot test these ideas.

Nor are we able to test how much nonrespondents vary from respondents because the university confidentiality procedures do not allow us to know who were contacted but did not respond. If a random sample of non-responders could have been contacted by telephone, this variance could have been tested.

As it is, we must rely on generalizing from previous studies on older women students in the literature where $n_{onrespondents}$ are contacted. These studies commonly find nonrespondents to fit the same model as respondents or to vary on only one or two demographic dimensions such as age. However, because we do have a reasonably large number of withdrawers and many graduates, we are able to assume robustness of the sample relative to the assumption of normal distributions.

A recent study addresses the argument in the literature about whether nonresponse bias is a serious or a minor problem (Hogan, 1985). This study compares data gathered from graduate cohorts from thirteen junior colleges during six consecutive years and draws conclusions particularly about research in Student Affairs

Departments. The highest response rate, 67%, is achieved from new graduates in the year procedures were changed to conform with the design and implementation procedures (including three-wave mailings) used here. Analysis is done on the differences from the previous years' data when the response rate was only 35% and on differences from known information about the population. The lower response rate results show few differences from what is expected. The higher response rate results differ from known values only in that more women replied than expected. And even with the lower response rate, no substantive effects are found on correlational relationships. This study on very recent graduates (satisfied consumers who were locatable?) would seem to affirm the probability of having here gathered rather accurate data.

One of the problems of attempting to study those who dropped out of the university is that those who have left the university may have less reason to want to remain in touch or to want to respond to anything sent to them by the university. They may be very disenchanted, they may be angry, they may just not care, or they may be too caught up in whatever the reasons were which caused them to leave the university to take the time and energy to respond to this survey. Furthermore, according to some of the responses of the sample, particularly of current students, some women who have not yet graduated or who may yet have or plan on some connection with the university have some anxiety about responding to a survey which comes from the university because they fear there may be reprisals at some point if they speak negatively, despite assurances of anonymity in the cover letter. Therefore, a response rate of 41 women or 11% of the

sample who have withdrawn from the university is probably a rather high response rate for dropouts.

It was assumed that many more would have dropped out but that it would be difficult to get them to respond to the survey. As noted in a previous chapter, many of these women who have left Michigan State University responded only after having received all three waves of mail. It thus seems most appropriate to have designed such a comprehensive mailing series and/or to have colorfully personalized envelopes and letters to reach this particular group, since they seem to have responded best to the third contact.

USE OF UNDERGRADUATE WOMEN ONLY

The fact that only undergraduate women are studied makes this population more homogeneous to study but limits our understanding of the total older student population. Specifically, we learn nothing about graduate students nor about undergraduate men at the university. Therefore, generalizations here need to be limited specifically to older undergraduate women. However, this limitation also allows us to better and more accurately understand this one group of older students than if we had sampled those other groups, and questions can be specifically tailored to the older undergraduate female situation. There is no intent to generalize beyond older undergraduate women. In fact, a strength of the study is that it was intentionally limited to this population (which should have less variability than studying older students as a whole) specifically to allow us to be more definitive in findings about one subgroup.

NON-OBJECTIVE NATURE OF SURVEYS

As noted in the opening chapter, surveys and self-report studies are, by their nature, not objective studies. Therefore, the subjective biases of the respondents must be taken into consideration. Instruments particularly for psychological measures obviously may be thought to suggest a more desirable and less desirable direction. Although literature cited earlier suggests this influence is small in most of the formats used here, and although this issue was carefully considered in the construction of the survey, this possible bias cannot be ignored. Probably the most significant response to this limitation is that, of those questions which are the same or nearly the same as those used in national large sample surveys, the proportions of responses across the entire sample are not different from those in the literature.

Bradburn (1969) declares the norms for happiness in several national samples to have much stability. He finds they average about one-third very happy and 5 to 15% not very happy. In the present study almost exactly one-third are very happy and twelve percent are not very happy.

Lowenthal, et. al. (1975) say older people are less happy than the above parameters but are rather stable in happiness unless they are under particular stress. Campbell, et. al. (1976) believe that use of the very happy category is declining. They find happiness correlates .50 with satisfaction and that happiness is generally most strongly correlated with marital status.

Robinson and Shaver (1973) find one-fourth completely satisfied, two-thirds satisfied and about ten percent negative. Campbell, et.

al. (1976) suggest singles and divorced women are less satisfied. They find seven percent dissatisfied and 22 percent completely satisfied. These compare to findings in this study of one-fourth exactly completely satisfied, sixty percent satisfied, and about sixteen percent, heavily weighted by the graduates, to be negative.

Robinson and Shaver (1973) discover that satisfaction is stable over time and that satisfaction and happiness correlate moderately (.47). They also learn satisfaction correlates very little (.06) with social desirability. The present study finds happiness during school correlates at a .66 level with life satisfaction during school.

Comparing findings on major national surveys with findings in this study suggests that the presently found satisfaction and happiness ratios are fairly typical of the population in general except for an increase in dissatisfaction during school for graduates. Interestingly, graduates become somewhat more satisfied after leaving school and dropouts become less so.

INSTRUMENTATION

Finally, the study is limited by the questionnaire itself. It is defined by and limited by the questions which are asked, the format in which they are asked, and the questions which are <u>not</u> asked. All studies share this limitation. We do not know all we might have known if we had asked different questions. For example, women are not asked what their educational goal was when they enrolled and whether, at the time of enrollment, they intended to get a degree. Some may have had a non-degree goal or their aim may have changed in the course of their education. An aim which changed may have appeared in one of the less than sure responses to the question on degree expectation. And an

achieved non-degree goal should have appeared in the question on achieving all that was wanted as a reason to withdraw. A question of intent could have been more clear.

The structure of some questions could be improved, particularly when questioning about changes or crises. Although the question noted such changes or crises could have been positive or negative, the questions would have been strengthened if they had asked for this direction to be indicated. We now simply do not know how the crises or changes were perceived nor do we know whether possibly negative responses could have triggered positive growth, although some marginal comments suggest such a possibility.

It is possible that, to some degree, the number of significant relationships pertaining to withdrawal could be inflated because only withdrawers and current students were specifically asked to respond in this section and graduates may have therefore responded in quite reduced numbers. Because of this possibility, findings about reasons for withdrawal and frequencies or reasons given by withdrawers should especially be noted. It is likely, though, that statistical comparisons on these items may be less valid and should be used with caution. Another time, all subjects could be asked to respond to such a question. Even then, the difference between the possibility of withdrawal (which may seem like a light-weight question to some) and the fact of withdrawal could make comparisons on this section less than fully accurate.

However, when only dropouts and persisters are compared on reasons for withdrawal, fewer significant differences are found than when comparisons are made across all categories of student status.

This dropoff is a bit of an enigma if the lack of response here from graduates is truly problematic, since one might expect the lack of graduate responses to have emphasized the differences when analyzing only the two groups.

Nevertheless, one question remains unanswered: If everyone had responded to this question, would these differences have remained significant? Alternatively the question could be phrased, are the relationships significant only because a higher percentage of withdrawers answer this section than did graduates? Such questions are unanswerable.

The format could be simplified although it would mean lengthening the survey instrument itself. Although the pilot study did not encounter this problem, some women did mark several answers to the three multiple response questions but then did not go back (as per instructions) to indicate a primary response. Therefore, a second set of all possible responses perhaps should be offered to elicit the one main response. Unfortunately the response rate on the "main reason" is lower than the response rate to the request to check all that apply on three questions. However, since this dropoff was not large and the numbers of responses remain high, the data still is useful.

Despite these instrumentation limitations, we have learned much that is of value. Hindsight could improve nearly every questionnaire. This one has served rather well.

Given the limitations on generalizability from this study, it remains important to not underplay what we have learned. Each piece of knowledge which is contributed to the literature is useful now and is one more springboard for learning more in the future. Therefore,

we must value that a new piece of significant information is added here, despite its limitations.

DISCUSSION OF MAJOR HYPOTHESES

H1: PSYCHOLOGICAL ADJUSTMENT

This study has three primary hypotheses, one of which has two parts. Three secondary hypotheses are also advanced. The first hypothesis is that among women undergraduates recently in college, those who persist to graduation are more likely to show better psychological adjustments as measured by having higher self-esteem, internal locus of control, reporting more happiness and life satisfaction, coping better with crises, and feeling they are getting more of what they want out of life than those who dropped out. Of these psychological adjustment variables, graduates do see themselves as being better able to cope with and handle crises than do dropouts. Although locus of control as a complete measure does not differentiate these groups, the first factor in the locus of control scale (which includes the large majority of the items in the scale as found by factor analysis) does differentiate the dropouts from the graduates, with the graduates being in the direction of a higher internal locus of control.

Happiness during school also is significant differentiater. However, it is significant in the opposite direction to that predicted. Withdrawers claim more happiness for their school period than do graduates. The satisfaction measures show no significant difference between dropouts and persisters. An interesting variation noted while examining the frequencies is that graduates report

themselves as having been more happy than satisfied during school and dropouts report themselves as having been more satisfied than they were happy.

The other specified measures do not differentiate the groups, although locus of control turns out to be a necessary part of a discriminating equation.

Clearly, psychological adjustment, at least as measured by the collection of six single items and two batteries used in this study, is not a highly homogeneous differentiation variable. At least partial explanations of this finding may be found elsewhere within the survey. For example, neither those who drop out nor those who stay nor current students list that self-confidence is much of a problem for them. Only twenty out of the entire 361 women and only three of the actual withdrawers list self-confidence as one possible reason for withdrawal. And although personal problems are cited as reasons for previous withdrawal and/or as causes or results of the return to school, more personal problems are listed by graduates than by those who left.

POSSIBLE EXPLANATIONS OF FINDINGS ON HYPOTHESIS 1

Four different explanations of this phenomenon are possible:

1. The first possibility is that the respondents simply either do not wish to paint themselves in a poor light or that the respondents who do answer the survey are a better adjusted portion of those who have been at Michigan State University and are particularly a better adjusted portion of those who withdrew. As noted in the limitations section, if this were fully true, no significant differences would emerge. Yet many did. And when marital status is

used as a second independent variable with criterion groups, the pcyshological variables do become significant discriminators, primarily in the directions hypothesized.

Although we do not know about nonresponders, previous studies suggest that the need to present socially desirable responses on a survey is relatively low as noted in the review of the literature. And previously cited data on mailed surveys seems to establish their relative freedom from response bias. Therefore, although this possibility may have some validity, other explanations appear to be more useful.

2. A second possibility is that psychological adjustment is not adequately defined and/or measured in this study. Because of the complexity of the construct of psychological adjustment and of the subconstructs used here (such as life satisfaction or locus of control), our ability to accurately measure these intrapersonal variables is as yet evolving. The instruments may not be able yet to pick up variance which may truly exist in the population. For example, since the modal score on the self-esteem instrument is the highest possible score, it appears the instrument is not sophisticated enough to pick up variability in self-esteem. Furthermore, in several discriminant function analysis equations and when comparing married graduates to married dropouts or divorced graduates to divorced dropouts, self-esteem does differentiate in the predicted direction. Other constructs may similarly yet need improved methods of measurement. Only by further studies which define psychological adjustment in the same way as in this study, in studies using other

definitions and/or measures or in the future use of more sophisticated instruments can we learn more.

It is useful to note that in the discriminant analysis, various psychological adjustment factors are necessary variables in almost every attempted equation which classifies accurately at least three-fourths of the persisters and withdrawers. Several of these equations include three to six of the variables which are considered here to be part of psychological adjustment. The final equation used here includes three such variables: locus of control, happiness during school, and getting what is wanted out of life. Curiously, because of intercorrelations of the variables, the adjustment item which is significant alone in differentiating persisters and withdrawers is not chosen in the discriminating equation: coping with crises.

It does seem that although this hypothesis does not hold well in isolation, it is an important ingredient in a broader understanding of dropouts and graduates, particularly because of its effects when using marital status as a covariable and when finding a combination of variables to best predict who will drop out and who will persist.

Psychological adjustment continues to be a difficult construct to define and operationalize well, but we do better to use it as a relatively imprecise tool now than to ignore it because of lack of precise operationalizing.

3. The third possibility is that people who do come back to school are quite well adjusted or they would not have had the courage to undertake this venture. This does seem to be part of the explanation. Further education for some purpose is clearly important enough to older students for them to uproot or to change their

established patterns of life enough to attend college at a stage of life when they are at least twenty-five years old, although we do not know fully what meaning this change has for these students.

The literature is quite clear that many people consider returning to college who do not actually do so. In the Adult Services office of this university and the Department of Lifelong Education, many inquire about a possible return to school who do not come. Issues such as not believing they can do it, perceived concrete self-deficiencies in academic skills, the inability to manage time, or the fear of culture shock when being an older student in a youth environment, or the lack of family support may well have kept out women with poorer psychological adjustment.

It is remarkable that, even among those who withdrew, the responses of lack of support, lack of interest or other psychological issues of the twenty-one options offered for reasons for withdrawal are each checked only by three or fewer dropouts. Can it be that those who approach a major (massive?) university such as this one are the more self-confident people and that a similar study done in a less threatening environment such as a community college or a commuter college may find people who are less sure of themselves?

Can it be that, as the literature would suggest, women may be rather anxious about their ability to cope and lacking in self-confidence during the first several weeks or months that they are students but that they do gain self-confidence as they begin to find they actually can make it in the university? It is possible that some of these people may have shown poorer adjustment only during their initial period as students but made the necessary adaptations to cope

with their student roles. If they had been tested during the first month of school, the adjustment variables could have been different.

If this idea is true, only those whom this study caught very early in this beginning segment of their educational career would be at the floundering, poorly adjusted stage. Others would more likely show the self-assurance that often accompanies success. Under this possibility, few of the current students are likely to report that early stage of their education due to their reporting what their experience is now, two years at least into school. The withdrawers either remained longer than their first term or two or dropped out early but are now looking back from a year and a half later and attempting to recapitulate their experience.

Undergraduate returning women may simply be primarily well-adjusted, more so than stereotypes would say. They may still feel stresses. They may say or find they have difficulty coping. But they are handling their roles relatively well, as evidenced by the preponderance of graduates in the sample. They may have had a strong sense of self in order to have returned at all. They may be a self-selected, well-adjusted group of people. Good adjustment does not mean things will not go wrong for them. Rather, it means they handle things relatively well and do not let life get them down too often. They tell of crises that have occurred. They may have had situational times when their adjustment may have been poorer temporarily. But they may simply be survivors, copers, and on the whole, rather well-adjusted people as Wertheimer and Nelson (1977) suggest.

4. A fourth possibility is that moderator variables or more complex models need to be considered which incorporate rather than ignore psychological adjustment variables. This seems very reasonable, given the findings of this study. As noted in the analyses of variance using marital status and criterion groups as independent variables, satisfaction during school, satisfaction since school, getting things that are wanted out of life and the self-esteem battery all significantly differ, although they did not differ when analyzed with the variable of marital status not included. When using both of these independent variables, only the self-assessment of life control and the locus of control battery still are not significant. These findings raise the important question of why marital status has so much effect on these adjustment factors.

In the individual tests comparing married with not married, single with not single, and divorced with not divorced women, the divorced women in the study are clearly a highly heterogeneous (or a highly unpredictable homogeneous) group: Only a few results are significant for them. This fits with the flow of ideas which originally triggered this study:

At first it was thought that those women who entered the university under much stress, particularly in cases of divorce when women were recovering from one chapter of life and trying to prepare for a new chapter while perhaps also coping with the weight of finances and the lack of child care and a move, may find coping with student life quite difficult. After observing such women for a while, it became clear that some women are overwhelmed by the crises or changes of various types in their lives. But many more who are

struggling mightily nevertheless cope very well. It becomes clear that many of these stressed women do get good grades and feel rather proud of themselves. They manage to cope financially and usually without a lot of debt. Many cut their standard of living severely and often relocate into inexpensive housing. They see it as critically important to get the degree in order to have a desirable future. Many endure stresses which others may consider overwhelming.

Therefore, rather than saying, as originally intended, that women under much stress would drop out, the question of how well they could manage despite the stress and how well they were adjusted seem to be more likely to determine whether they stayed. This premise still may be true for some women. However, alternatively it may be true that those who were not able to cope did not try to come here.

Furthermore, the primary reason for returning to school which differentiates between graduates and dropouts is that graduates are more likely to indicate at a highly significant level that they wanted to prepare for a job. Perhaps the clarity of their concrete pragmatic concern kept them in school no matter what else happened.

A reasonable explanation includes acknowledgement that the third possibility is important: Those women who attempt an education at a major university such as this one are rather well adjusted and, although perhaps stressed, primarily do have the psychological health to persist. This theory needs to be combined with the effect of moderating variables such as suggested in the last possibility above. The issue is apparently more complex than the original hypothesis indicated, but the hypothesis is not necessarily therefore totally wrong. Instead, we need to continue to look for the combinations

which best predict the educational future of these women, as was done here by discriminant analysis, in order to understand better the interactive nature of their behavior. We should apparently neither abandon the search for nor the belief in the effect of psychological variables nor can we confine our study to such variables to the exclusion of other more circumstantial parts of the lives of older undergraduate women.

Some evidence that there may be stress in lives but that the students can cope with it comes from the fact that both the total number of previous crises and crises resulting from the return to college were cited by more who nevertheless graduated than withdrew, although those graduates were less happy than withdrawers. Apparently the graduates experience a fair amount of stress but manage to stay in school anyway. A very interesting question would be to pursue exactly what those crises or stressors were which propelled students into school to see if they were more life-changing elements or more severe stressors which simply had to be lived with or overcome for the graduates than for the withdrawers.

It is also important that the graduates saw themselves as more capable of dealing with crises. Perhaps that alone is a significant and sufficient explanation of why they were able to stay when withdrawers did not. Perhaps is less important to ask if they are happy or satisfied and more important to ask if they have the goal of graduating and whether or not they are able to deal with the crises which come their way in styles which will keep them from dropping out.

A striking finding of the study is that, among married women, the predictions on psychological adjustment almost entirely all hold and,

with the exception of the happiness question, are in the predicted direction. For the single women, the results are somewhat less clear-cut although not as diverse as with the divorced women. It is the married women graduates who are primarily better adjusted and the singles who are more clearly in jeopardy schologically.

H2: EXPECTATION OF A DEGREE

The second hypothesis is that women who persist to graduation will be more likely to have believed that they would graduate than those who dropped out. This hypothesis is strongly supported in this study ($p<.001$). As was thought when this project was designed, it is possible that the simple question of expectation of completing a degree is the most critical single question that can be asked to differentiate possible future dropouts from future persisters early in their educational careers. This variable was usually first and often otherwise second in strength of differentiating ability in nearly all of the more useful discriminant analysis equations. If this item continues to hold its power in other studies, it could be a most useful question for use in a school because it may not be seen as threatening to be asked by many different people in several settings in a university. It could also be asked on an admissions questionnaire, although at that time people could possibly assume an honest negative response could prevent admission or cause future discrimination by the institution.

H3: TOTAL GRADE POINT AVERAGE

The third hypothesis has two parts. The first part is that those who graduate will have a higher grade point average than those who drop out. This hypothesis is supported by the study.

The second part is that persisters will have a higher recent (last one-term) grade point average than withdrawers. This, too, is supported although less strongly than the first part of this hypothesis.

Since the cumulative GPA for many women had to balance off the total previously accumulated grades if they had an earlier record at Michigan State University, the gain in cumulative GPA over the previous GPA is very important. Given that such averages <u>have</u> improved, one wonders why the last term's grades do not differentiate these two groups as well as or better than cumulative GPA's. Can it be that the focus moved away from grades to future plans and expectations for those about to graduate?

It is noteworthy that although a cumulative grade point average does distinguish students, the grade point average held before this entrance to college does not significantly differentiate the criterion groups. This means that, contrary to formulas found very useful on younger undergraduates, previous educational achievement may have less to do with persistence than the students' purpose or other variables in their lives. It seems most important that these people did not leave college previously because of academic difficulties with any great frequency, nor are they expecting to leave nor have they left because of academic difficulties now.

Whether they can handle their academic work does not seem to be a critical problem for these students. Rather, other segments of their lives seem to effect more what choices they make. For example, although those who have not dropped out suggest that finances would be an important reason for leaving now, for those who actually did leave, other issues such as time pressures, role overload and family responsibilities are more critical reasons for departure.

This does not say withdrawers are not able to cope academically. It does say they see themselves as caught in the squeeze of trying to balance several roles and decided to lessen that pressure at least for a while. It is also important to notice that withdrawers rarely said they were satisfied with their choice to leave. Instead they see this as an interruption which will lead to future education at a later time. This seems to confirm that although dropouts may get lower grades, these grades are not so low that these women are in academic jeopardy. The lower grades may reflect, therefore, an overload rather than lack of ability and may also reflect a lack of belief in or intent to compete a degree now.

One procedural question in the design of this study was whether to ask subjects for their GPA's or whether to get their informed consent to obtain grade records from the university registrar. At least in this population, the decision to ask the subjects to supply grades appears appropriate and perhaps even preferable. All except two provide cumulative GPA's, which may well be more than the number who would have signed a consent form. Nearly as many provide recent one-term GPA's. Even when asked to provide GPA's from before this last entrance to college, 90% or those with previous college credits

do so, and this information would not have been available from the registrar. Furthermore, the most common response is to give a GPA to one decimal point. Many give it to the second decimal point. These women appear likely to be good sources of quite complete and rather accurate information.

DISCUSSION OF SECONDARY HYPOTHESES

H1: CORRELATION OF ADJUSTMENT MEASURES

Three secondary hypotheses are tested. The first is that measures of psychological adjustment will be significantly correlated with each other. This is tested in two ways, first using correlation coefficients which assesses both significance and strength of association. Many of the items show a moderate correlation with each other. Few are highly correlated, and some whose correlations are significant are only weakly related. One surprisingly weak significant correlation (.21) is between the single-item self-assessment of locus of control and the battery assessment of locus of control. Perhaps a single-item question needs to be more carefully constructed, or they may correlate better in another population, or the battery or the single question may have received a more skewed response than expected.

Secondly, the factor analysis highlights three interesting results:

1) As Duttweiler (1984) proposes, the locus of control instrument has two primary factors. However, in the current population, the two factors which are found primarily in her instrument use somewhat different subsets of items than she used in

her factors and are therefore somewhat different factors than what she found. This may be because her study uses general college populations of both sexes and of all ages and this study focuses on a narrower population. Nevertheless, the two factors are relatively cohesive and internally relate much more strongly to each other than to most other items.

2) The self-esteem measure is also quite cohesive and the items are also better related to each other than to items outside the battery.

3) The single-item measures of psychological adjustment correlate as well with each other as do the items in the other intact scales. Together the single items have a standard score alpha level of .73, a relatively good reliability estimate.

Therefore, these scales seem to have both face validity and statistical reliability.

Since the correlation coefficients are moderate at best, it cannot be assumed that one of these measures or items can fully stand for another, but instead each measures some overlapping space as well as some independent variation.

H2: SOCIODEMOGRAPHIC VARIABLES

This secondary hypothesis is that women who persist to graduation and those who withdraw do not differ on the sociodemographic variables of age, marital or parental status, income or employment.

In the cases of age, marital status and parental status, the hypothesis is upheld. The two groups do differ in income and hours worked per week. Interestingly, the withdrawers have higher income, a variable which is highly correlated with being married, but are also

more likely to be working themselves than are the graduates. If differences had been predicted, one might expect withdrawers to be more likely to be working. But they could also have been expected to have more financial problems and less income than graduates.

From these two variables alone, it would appear as though withdrawers have an adequate life elsewhere. They seem to already have jobs and it is possible they may not need the degree as much as do the graduates in order to create an economically acceptable life for themselves. This would be explained in part by the adequacy of income and the problem of income questions. Although income itself is not useful in discriminant analysis equations, the perception of whether or not finances were seen as a problem is a useful ingredient. Perhaps the most usefulness of this variable results from the fact that t-tests show the item of the problem of finances to be much more highly significant than the also significant differences in income or its perceived adequacy.

Contrary to the literature, spouses' level of education is not correlated with income in the family nor with whether or not the woman finishes a degree. Also contrary to suggestions in the literature, whether or not one is a parent is not a critical variable. It appears that those who graduate and those who withdraw are both equally likely to be parents and that the degree of family demands may not have critically affected whether or not they remained as students. In fact, withdrawers who are parents have fewer children than persisters have, although the dropout experience before age twenty-five took place for family reasons at a significantly higher rate for graduates than for the withdrawers.

As a whole, the women in this study are less likely to be married or to be parents than nearly all those groups studied in the literature with more than expected here in both the always single category and the divorced category.

H3: DISCRIMINANT FUNCTION EQUATION

The final secondary hypothesis suggests that an equation can be formed which would be quite helpful in identifying those who would persist to graduation or drop out without graduating. Ultimately, the fact that such an equation is formed here which is both highly significant and is rather good at prediction may be the most important finding of the whole study. Apparently right questions are asked and useful information is learned here, since the purpose of the study was to identify dropouts and persisters and that has been done above the 80% level. Further work is yet needed to refine the identifying variables and to broaden the generalizability of such a set of predictors.

Discriminant function analysis does not permit inclusion within one equation of variables which are strongly correlated with each other. Therefore, some variables which may help discriminate between the criterion groups do not appear in this equation although they frequently appear in other equations. For example, happiness and life satisfactions during school each often would appear in an equation when used in a set of variable without the presence of the other. But both do not appear together because of their higher intercorrelation (.66) since they then do not have enough residual independent variance. However, the variation of life satisfaction which does not overlap the variation of happiness cannot be included at all.

Another variable which, by itself, is a relatively strong differentiator is the reason of returning to school to prepare for a job, a response marked more often by graduates. However, this cannot be used in the same equation as the total number of reasons for recent reentry, since a variable which is part of a larger variable cannot be used in the same equation with the broader variable.

These limitations of discriminant analysis can exclude useful information.

Discriminant function analysis is a very useful technique, despite these limitations, for combining a variety of variables in a regression equation to identify which elements add useful information. The discrimination probability of chance alone is that half of the total criterion pool would be dropouts and half would be persisters. In stepwise analysis, at each step a new variable is added to improve the discriminant probability and the previous collection of variables is examined to discover whether any provide information which is no longer effective at discriminating between criterion groups and should be removed. When no variables which still can assist in discriminating at a significant level remain to be used in an equation, analysis ceases. At this point, the relative strength of the discriminators is given and the subject pool is classified into groups.

Some equations make more errors of predicting women to be graduates when they actually are withdrawers. Others make the opposite error. Since it seems most critical to identify potential dropouts, equations correctly identifying the largest proportion of

dropouts are chosen over nearly equally good equations making the opposite error.

The discriminant function equation does correctly predict group membership for 84.0% of the graduates and for 81.6% of the withdrawers. However, the base rate of graduates and dropouts in the population appears to be quite skewed toward graduates. The uneven sample sizes of graduates and dropouts increases the prior probability of getting a larger number of errors in miscategorizing actual graduates (Meehl and Rosen, 1955). Therefore, of the 170 women who are predicted to graduate, 96% are actually graduates and 4% are actually dropouts. Of the 62 women who are predicted to be dropouts, 50% actually are dropouts, since a miss rate of only 16% of the dropouts is 31 women and a hit rate of 81.6% of the dropouts is also 31 women.

Table 42 Classification Results of Discriminant Function Analysis

Actual Group	Number of Cases	Predicted Group Membership			
		Graduates		Dropouts	
		n	%	n	%
Graduates	194	163	84.0	31	16.0
Dropouts	38	7	18.4	31	81.6
Current Students	107	74	69.2	33	30.8

However, within the 62 women who are predicted to be dropouts are 81.6% of all the dropouts. The 62 women is a much smaller group of women to target for possible program planning than to have targeted all 232 women in the criterion groups, and this group of 62 women misses only seven of the actual dropouts. Therefore, the errors are

in the preferred direction. In the future if the ratio of dropouts to graduates continues to be in the range found in this study, the assumption of unequal sample size could be factored into the discriminate analysis a priori and could perhaps produce greater accuracy.

The fact that one equation can correctly identify such a high rate of two randomly constructed subgroups of the dropout/persister population is exciting. This means we can break down a very complex issue into manageable dimensions and can predict most of those who will persist to graduation and can target reasonable pools of those who may drop out if we are willing to look at these older women undergraduates as complex wholes whose actions are predicted by a collection of sociodemographic, academic and psychological equations using varying information from all of these domains.

Rather surprisingly, the final equation does not include part-time versus full-time enrollment because of the high correlation of that item with the hours of employment weekly. Nor does life satisfaction make a difference because of its correlation with happiness. Self-esteem is a factor which seems important until the less likely (farther from significant) locus of control scale is added and surprisingly is a significant factor in the analysis. But this selection causes self-esteem to become no longer useful.

Interestingly, the perception of whether income is a problem is a better discriminator than adequacy of income, although adequacy comes somewhat closer to paralleling actual income. Additionally, both adequacy and the problem status of income are better differentiators than income itself.

CONCLUSIONS

What have we learned?

We have found a population of fewer married women and fewer mothers than expected who dropped out at a younger age more often than expected for lack of interest or goals and less often for family/marriage reasons than the literature suggests. A surprisingly large number of changes or crises in their lives both contribute to the decision to reenter and result from the return to college. They return for reasons of personal satisfaction more often than the literature leads us to expect.

We have learned that we can differentiate between dropouts and graduates with a rather high degree of efficiency and that we can predict with above eighty percent accuracy those who will persist to graduation and those who will not.

Furthermore, we can predict such persistence with a rather brief questionnaire. The entire questionnaire used in this survey takes approximately ten to fifteen minutes to complete. A questionnaire using primarily only the items identified by discriminate analysis to classify women as persisters or dropouts would take no more than five minutes at the most to complete.

It can be very useful to attempt to pinpoint who is more likely to drop out and then to become more personal in trying to find out what might help those potential withdrawers to stay and complete their education if that is what they desire. It is possible that some interventions, pragmatic or supportive, in which the university could engage to could reduce the dropout rate of older women undergraduates

and perhaps others as well. On the other hand, we must recognize that often situations external to the university (job or family, for example) require time and energy now, and we may need simply to accept that some of these women will come in and out of school several times.

We have learned that the issue of who graduates and who does not is more complex than simple psychological adjustment, but that such adjustment does appear to be an integral part of this issue when taken in conjunction with other variables.

THEORY

These findings may fit well with a very recent theoretical model by Bean and Metzner (1985) which attempts to define a model of attition for older students. The premise is that the attrition process differs for what they call the "nontraditional" students, in that they are more effected by the environment external to school while the social integration process or lack thereof for younger students within the educational setting is critical. They do not differentiate older students by sex.

In this model, attrition is affected by four general variables:

1. Grade point average, which they see as highly influenced by high school grade point averages but which the current study's findings lead one to suspect is not highly important.
2. Intent to leave, which they see is influenced by two factors. One influencer is psychological outcomes which they see as the person's conception of the utility of education, their satisfaction with it, their goal commitment, and the stress they experience. The other influence on the intent to leave consists of academic variables which

include study habits, academic advising, absenteeism, uncertainty about majors, and course availability.

3. Background and defining variables, which they describe as consisting primarily of high school performance and educational goals but also including age, enrollment status, residence (on or off campus), ethnicity, and gender.

4. Environmental variables, defined as including finances, hours of employment, outside encouragement, family responsibilities, and the opportunity to transfer.

In their conceptual path model, statistical effects, both directly and indirectly, of a given variable on dropping out can be calculated. Compensatory interactions are suggested. For example, environmental variables are expected to be more important for nontraditional students than academic variables. Therefore, when environmental and academic variables are both favorable for persistence, the student will remain. When both are poor, the student will leave. When academic variables are good but environmental variables are poor, the student will leave and the positive effects of academic variables would not be seen. But if environmental support is good and academic variables are poor, the student will remain since the environmental support would be more important than the poor academic environment. Bean and Metzner see a similar compensatory effect between academic outcome (GPA) and psychological outcome with the later being more important. Thus good students who are stressed or getting little satisfaction, have low goal commitment, or are seeing little practical value in their education may leave.

These authors suggest that age per se is irrelevant except insofar as it indirectly suggests the stage of family responsibility or level of employment being experienced. They see hours of employment weekly effecting withdrawal and amount of classes taken. Intent of achieving degrees or taking courses for pleasure should be ascertained and degree oriented people should be separated from the others in attrition models, they say. High school GPA's are seen primarily as an indicator of ability rather than of predicted actual achievement.

Environmental variables are seen as primarily outside the ability of the college to control but may have a major effect on retention. Interestingly, Benz and Metzner suggest what this current study suggests elsewhere, that finances are primarily a socially acceptable excuse which can be used to cover more personal reasons for withdrawal such as lack of commitment or "internal personal liabilities". They do find evidence in the literature that older students were more likely to work than not but did not find evidence that working older students were more likely to drop out than were non-working students. They wisely say that perhaps college GPA is less predictive of persistence for part-time older students than for more traditional students. Educational aspirations, defined as the highest level of college education desired, and goal commitment are assumed to be related in this model.

It does seem important in this present study, particularly when taken in light of the many, many comments written, that the student's perception of how practical the education will be becomes more significant when it becomes more difficult to attend classes. If

scheduling, parking and family or job responsibilities, finances, etc., become problematic, it may be that the personal satisfaction which many people cite as a reason for education, could decline. The presence or lack of utility of a degree could then become more important in keeping students rather than just in attracting them in the first place. Benz and Metzner (1985) find few studies assessing the relationship of satisfaction and attrition, but suspect this variable could be important.

The review of the literature chapter in this study indicates there has previously been no theoretical basis which is particularly helpful in predicting attrition. The present study attempts to broaden theory by suggesting that more emphasis needs to be placed on the psychological variables and personal expectations. Perhaps less emphasis should be placed on the concrete, external and situational variables.

The model offered by Bean and Metzner appears to be a good amalgamation of previous inadequate theories while answering many of the previous theoretical weaknesses. At this point, their model seems to accept many of the significant findings from this study. Their model needs to incorporate more psychological variables in direct and interactive ways, should attend yet to both specific reasons for reentry as well as the sheer number of such reasons, and needs to attend to marital status as an interactive variable at least for women and to instrumental ability to gain what is wanted out of life and to cope with stresses as well as assessing what stresses occur. It further should look at crises and stressors in students' lives more carefully.

IMPLICATIONS

This study has a variety of implications. Some are rather clear. Others are questions which are raised by the study but may or may not yet have answers.

Many variables, especially those of psychological adjustment, stand out more strikingly when marital status is controlled. Many of the stresses of multiple role balancing are family related. Yet it is the very women who are combining marriage, often including children, with other commitments and then graduate who are appearing better adjusted psychologically than the married dropouts or single or divorced graduates. Can it be that some married women have a stronger support system at home which both emotionally encourages them and provides for them economically and perhaps takes care of some home chores also? Can it be that married women who need more income go directly to work at whatever level they are already qualified, and those married women who come to college are under less pressure of necessity for completing a degree quickly and for paying their way in the meantime which leaves them better able to cope with school at whatever pace is necessary? And what does this say about the married dropouts?

For married women at least, it does seem to be more accurate to say, as does the study's first hypothesis, that either they are better adjusted psychologically and graduate or are less well adjusted and withdraw. A kernel of a larger idea appears to be embedded here which we lack adequate information to assess. Are those married older women undergraduates who drop out less well adjusted in general? Or would

they also say they are having difficulties at home which temporarily cause problems?

Withdrawers in general indicate that time pressures and family responsibilities as well as job responsibilities are causes of their withdrawal. But we do not know whether married dropouts are less competent and less well adjusted people or are just under more stress than the married students who persist. It is worth noting here that graduates report more changes or crises contributed to the decision to return and also more changes or crises resulted from the return to schooling. This may lend credence to the more general adjustment explanation than to the current stress explanation.

While most of the concern for older students expressed in the literature is for married women or for divorced mothers, both of whom have important visible relational ties, perhaps always single women who are in school at a later age have been neglected and need more assistance. They may lack active support systems, have smaller (often quite small) incomes than others, and may well be totally responsible for their own regular financial support and college expenses. Some write of the humiliation of having to move back home at this stage. They seem to <u>need</u> to get the degree for future economic support or for doing work they really want and yet often need to work at the same time to afford this. Two of the most frequent problems voiced by the always single women are the difficulty of obtaining financial aid when they have previously had adequate income and the problem of maintaining a job for income while coping with inadequate or inflexible scheduling policies at the university.

Older women students are an exciting population, a growing population, and a committed population as evidenced by the number of graduates in this two year period and as represented by the response rate from admittedly busy women. Many of them indicated their pleasure at being subjects of interest to their university, even while many took the opportunity to direct criticism at their alma mater. If we are to understand the comments made by these consumers as being the signposts of where the university could better accomodate these students, perhaps the attrition rate could be lessened. The university needs to become more sensitive to the problems of the growing population of older students within its gates which are within the university's power to change.

The frustration many older students have with this university, particularly including such issues as parking and scheduling, could be ameliorated at least in part by deliberate intent by the school. Then, perhaps the students' sense of satisfaction and utility would be increased and the attrition rate could be decreased.

On the other hand, since most dropouts say they plan to continue their education at a future time, we can ask whether this means the attrition of older students should be of less concern to us than it is. Alternatively, since the withdrawers primarily have <u>not</u> achieved all they wanted in education, the university may need to become <u>more</u> concerned in addressing their needs. Some situations cannot be changed, such as those of the women who write that their children need them at this stage but that they will return later. Other dropouts and a majority of the transfers say that scheduling problems are

important barriers for them. Perhaps the university truly can attempt to be more flexible for them.

As indicated in the introduction, the older students are projected to be the wave of the future in at least partially stemming the expected decreasing enrollment in higher education. It is precisely the type of information found in this study, both on the questionnaire and in the open-ended responses, which is rarely gathered and which can give a university good insights into how it is being viewed by its customers. This university and other institutions of higher education may need to undergo some serious self-examination of their own attractiveness to older students and then design ways to woo and keep such students while other more traditional enrollments decline.

Although university controlled issues are not stated in the set of predictive variables directly, many of the ten items of the predictive equation can be affected by the university such as arranging better financial aid possibilities so students can work fewer hours, scheduling classes more creatively for those who do work more hours, and assisting students in achieving their goals at the university by finding out what changes within university control could facilitate older students to better get the things they want here and making those changes.

From another perspective, we must acknowledge that several items in the predictive equation are intrapersonal. Withdrawers were enough happier while in school to make that item of third importance in the equation. What shall we make of this happiness among withdrawers? Does unhappiness drive graduates to finish? Are graduates too driven

to enjoy the journey? Is this item a retrospective glow over a part of their lives which withdrawers specifically say they wish could have gone on? Perhaps older women students can get counseling and/or advising which helps them more effectively get the things they want in life ot that helps them move to a more internal locus of control. If so, would this assistance increase their retention rate? We don't know the answers to these questions yet.

We may legitimately conclude that if dropouts are more likely to already possess a degree, to have higher incomes, to be married and to be working, many of them could be considered to be doing relatively well already. Perhaps more attention should be paid instead to the concerns expressed by all students in the open-ended question.

RECOMMENDATIONS

Now that we have this information about older undergraduate women in this university, what shall be done with it?

Several uses can be made of it. If a university department such as the Division of Women's Programs, Student Affairs, Adult Services or the cross-departmental Adult Student Network wishes to attempt to identify potential dropouts, a brief questionnaire asking only the questions used in the discriminant function equation or those plus others on which dropouts and persisters differ significantly could be sent to entering and/or current older students. Alternatively, a question could be added to the admission application assessing the expectation of completing a degree. However, such a question used in such a place could raise fears of whether a negative answer would

result in denial of admission and could lead to falsification by potential dropouts.

Once such identifying has been done, advising, counseling, support groups or services, and revamping of university policies and procedures (scheduling, parking, hours of office opening, etc.) could be specifically offered to older students in general and/or specifically to those at more risk for dropping out. Additional information could be provided to older students by mail before or after arrival at the university which could let them know of common pitfalls or experiences of older students and which suggests to them where within or outside of the university they can get support or pragmatic assistance.

The written responses from 245 women comprise information from nearly 25% of all older undergraduate women from fall term, 1984. Their views, both as categorized in this document and as originally stated, can be disseminated in the university. Perhaps their collective wisdom and experiences can bring about some changes in scheduling, in attitudes toward them, in sources of support made available, or in some other ways which could change the view shared by many respondents that Michigan State University is not "user friendly" to older students.

Recommendations for future study include that most of what is done here be now tested in other settings to define how generalizable the findings are. Particularly it would be important to ask the questions which significantly or nearly significantly differentiate dropouts and persisters in this study to see whether the same or a

similar discriminant function would differentiate dropouts from graduates in other settings.

Secondly, because current students also responded, this study designs two ways in which a followup can be carried out after some future time lapse. As of now, we have a current address for a majority of current student respondents and we know who they are. They can be followed in one of two ways. Information can be gathered from public university records for those who give their names to learn whether those students graduate or drop out in the future. We can then see whether we properly predicted their outcome. It would also be useful to survey these people in two or three years to see in what ways they differ in how they describe themselves then from how they see themselves now. It would also be of interest to see how they then retrospectively describe themselves and whether their retrospective memories match current descriptions. The groundwork has been laid for a good longitudinal study. The current analysis suggests that of the current students assessed, 74 are likely to graduate and 33 are likely to withdraw. Specific case numbers matching these predictions have been generated. It would be important to see how well the present discriminant function predicts their future student status and what changes they might require in that formula.

As noted earlier, further studies need to incorporate more clarity on the changes or crises and whether they are positive or negative, and how much meaning they have. A question should be added on what their specific educational goal was when they entered college.

In general, this study has remained exciting. Those people who are its focus deserve much credit for the effort they have undertaken and their persistence and success at achieving their goals.

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APPENDICES

APPENDIX A

COVER LETTER

MICHIGAN STATE UNIVERSITY

DEPARTMENT OF HUMAN RELATIONS
WOMEN'S PROGRAMS

EAST LANSING • MICHIGAN • 48824-1046

11 July 1986

Dear Older Present or Former Woman Student:

You are special! You are part of a growing group of women who attend college at a "non-traditional age. You are receiving this letter as an older (25 and over) woman undergraduate who was enrolled at Michigan State University in Fall term of 1984. You've probably balanced several roles and lived through a busy life within and outside the university. We would like to know more about your experiences and about your life as a student. We think it has been difficult and may even have not worked out for you. You've pioneered as an older student, and your help in understanding that experience now may better help others along that path.

We are assuming that some of you have by now graduated, some of you have left the university (with or without an intent to return to college) and some of you are current students. The enclosed questionnaire asks for information about who you are and how you've done academically. It also covers a wide range of experiences, attitudes and feelings. Although these vary widely in most groups, we want to learn what these have been like for you. We are interested in whether those who stay in school until graduation differ in any ways from those who do not, whether those who are currently enrolled show the same differences, and whether we might be able to predict those who want to remain in school but may leave in time to offer them some assistance. Your participation is important to increase understanding about possible differences among these groups. Please tell us how <u>your</u> life has worked, including any positive or negative reactions to your experience here. Our informal channels tell us too little about older students, less about you who graduate, and least of you who left without graduating. We'd like to understand you all better. This survey took only about fifteen minutes to complete in our pretest.

The more of you who respond, the more sure we can be that our picture is complete. The registrar has provided the mailing labels, so we do not know who is receiving this letter. We ask for your name, address and phone to know who not to recontact now and also so it could be possible to recontact some of you in the future for a possible longitudinal follow-up. If you do not wish to provide your name, address, etc., we would still like you to complete the survey anonymously. You are free to participate at the level you desire. No one has to respond, and we will never know who did not.

Replies will be treated with strict confidence. Names will be immediately separated from responses and will be kept securely. The code number you create would allow us to correlate any future information with your present responses while maintaining complete anonymity. All results will be reported anonymously. Within these limits, a summary of results will be available to you upon your request. Please contact Dorothy Mercer at (517) 355-8270 with any questions.

We're looking forward to learning what you have to teach us! Please complete and return the enclosed survey in the enclosed stamped envelope as soon as possible. Thank you so much for your time and your assistance.

Sincerely,

Diana Algra, Director
Division of Women's Programs
Department of Human Relations

Sincerely,

Dorothy Mercer
Consultant

MSU is an Affirmative Action/Equal Opportunity Institution

APPENDIX B

SURVEY QUESTIONNAIRE

CONFIDENTIAL QUESTIONAIRE
FOR PRESENT AND FORMER WOMEN UNIVERSITY STUDENTS

PLEASE CREATE A CODE NUMBER CONSISTING OF YOUR DATE OF BIRTH PLUS THE MONTH AND DAY OF YOUR MOTHER'S BIRTH. (Ex. Mine is 12 12 42 7 10)

Code number:_____

INSTRUCTIONS: PLEASE PLACE A CHECK MARK IN THE BLANK BEFORE EACH APPROPRIATE ANSWER UNLESS A SPECIFIC QUESTION GIVES OTHER INSTRUCTIONS.

1. WHAT IS YOUR CURRENT STUDENT STATUS?
   - _____1) Graduated (Bachelor's level) Indicate month and year:_____
     (Include a June, 1986, graduation here.)
   - _____2) Currently enrolled at Michigan State University
   - _____3) Transferred to another school in (month and year):_____
   - _____4) Have not been enrolled since (month and year):_____

2. AGE:
   - _____1) 25-29
   - _____2) 30-34
   - _____3) 35-39
   - _____4) 40-44
   - _____5) 45-49
   - _____6) 50-54
   - _____7) 55-59
   - _____8) 60+

3. MARITAL STATUS:
   - _____1) Never Married
   - _____2) Married
   - _____3) Separated
   - _____4) Divorced
   - _____5) Widowed

4. CHILDREN:
   (WRITE THE NUMBER IN EACH BLANK)
   Ages:
   - _____1) None
   - _____2) 0-5
   - _____3) 6-18
   - _____4) 19+

5. ONLY IF MARRIED, WHAT IS THE LEVEL OF YOUR HUSBAND'S EDUCATION?
   - _____1) Some or all high school
   - _____2) Some college
   - _____3) Bachelor's
   - _____4) Master's
   - _____5) Doctorate

6. NUMBER OF DIFFERENT TIMES YOU HAVE ENTERED COLLEGE:
   _____1 _____2 _____3 or more times

7. YEARS OF EDUCATION COMPLETED BEFORE THIS LAST TIME YOU ENTERED COLLEGE:
   - _____High school/GED
   - _____College: _____1 _____2 _____3 _____4 or more years

8. WHILE YOU WERE IN SCHOOL THIS LAST TIME, HOW WOULD YOU DESCRIBE YOUR FAMILY INCOME?
   - _____1) Very adequate
   - _____2) Adequate
   - _____3) Inadequate
   - _____4) Very Inadequate

9. TOTAL ANNUAL HOUSEHOLD INCOME DURING THE LAST THREE TERMS (OR LESS) THAT YOU HAVE BEEN ENROLLED:
   - _____1) $0-4,999
   - _____2) $5,000-9,999
   - _____3) $10,000-14,999
   - _____4) $15,000-19,999
   - _____5) $20,000-24,999
   - _____6) $25,000-29,999
   - _____7) $30,000-34,999
   - _____8) $35,000-39,999
   - _____9) $40,000 or more

10. HOW WOULD YOU DESCRIBE FINANCES WHILE IN COLLEGE?

_____1) A major problem
_____2) A moderate problem
_____3) A minor problem
_____4) Not a problem

11. DURING THE LAST THREE TERMS (OR LESS) THAT YOU WERE ENROLLED, ON THE AVERAGE WERE YOU EMPLOYED:

_____1) Not at all
_____2) 1-10 hours per week
_____3) 11-20 hours per week
_____4) 21-30 hours per week
_____5) 31-40 hours per week
_____6) over 40 hours per week

12. WHAT WERE YOUR REASONS FOR NOT COMPLETING COLLEGE BEFORE AGE 25? (PLEASE CHECK ALL THAT APPLY. THEN MAKE A SECOND CHECK BEFORE THE MAIN REASON.)

_____1) Marriage
_____2) Having children
_____3) Personal problems
_____4) Family responsibilities
_____5) Lack of support from family
_____6) Lack of support from friends
_____7) Lack of time
_____8) Academic difficulties
_____9) Lack of interest
_____10) Lack of purpose or goal
_____11) Lack of money
_____12) Wanted to work
_____13) Conflict of job and studies
_____14) Other
(Specify)_____

FOR THE FOLLOWING TWO SECTIONS, PLEASE CHECK ALL THAT APPLY. THEN INDICATE IN THE BLANK AFTER YOUR CHOICES YOUR ASSESSMENT OF THE SEVERITY OF THE CHANGE OR DRISIS. USE THE FOLOWING KEY:

KEY: 4=High 3=Moderate 2=Mild 1=Little

13. WHEN YOU CONSIDER WHAT CAUSED YOU TO ENTER COLLEGE THIS LAST TIME, DID ANY PERSONAL CHANGE OR CRISIS, POSITIVE OR NEGATIVE, CONTRIBUTE TO YOUR DECISION TO ENTER WHEN YOU DID? IF SO, IN WHAT AREA(S) WAS THE CHANGE OR CRISIS AND HOW SEVERE WAS IT?

_____1) None
_____2) Marriage_____
_____3) Family_____
_____4) Health_____
_____5) Personal problems_____
_____6) Job_____
_____7) Move_____
_____8) Change of status of family member_____
_____9) Other_____
(Specify)_____

14. DID ANY PERSONAL CHANGE OR CRISIS, POSITIVE OR NEGATIVE, RESULT FROM YOUR LAST ENTRANCE INTO COLLEGE? IF SO, IN WHAT AREA(S) WAS THE CHANGE OR CRISIS AND HOW SEVERE WAS IT? (AREAS HERE MAY OR MAY NOT BE THE SAME AS ABOVE.)

_____1) None
_____2) Marriage_____
_____3) Family_____
_____4) Health_____
_____5) Personal problems_____
_____6) Job_____
_____7) Move_____
_____8) Change of status of family member_____
_____9) Other_____
(Specify)_____

15. WHAT WERE YOUR REASONS FOR ENTERING COLLEGE THIS LAST TIME? (PLEASE CHECK ALL THAT APPLY. THEN MAKE A SECOND CHECK BEFORE THE MAIN REASON.)

_____1) Prepare for a job
_____2) Keep or upgrade present job
_____3) Prepare for a career change
_____4) Pressure from others
_____5) Personal satisfaction
_____6) Get a degree
_____7) To be seen as a success
_____8) Other
(Specify)_____

16. IF YOU ARE CURRENTLY IN SCHOOL, DO YOU ANTICIPATE COMPLETING YOUR BACHELOR'S DEGREE WITHOUT FURTHER BREAKS? FOR THOSE NO LONGER IN SCHOOL, WERE YOU QUITE SURE MOST OF THE TIME THAT YOU WERE IN SCHOOL THAT YOU WOULD STAY IN SCHOOL AND FINISH YOUR DEGREE?

_____1) Yes, quite sure
_____2) Sure much of the time
_____3) Unsure much of the time
_____4) No

17. IF CURRENTLY A STUDENT, HOW DO YOU FEEL ABOUT YOUR LIFE AS A WHOLE WHILE YOU HAVE BEEN IN SCHOOL? IF NOT IN SCHOOL, HOW DID YOU FEEL ABOUT YOUR LIFE AS A WHOLE WHILE YOU WERE IN SCHOOL?

_____1) Very satisfied
_____2) Mostly satisfied
_____3) Mostly dissatisfied
_____4) Very dissatisfied

18. ONLY FOR THOSE NO LONGER IN SCHOOL: HOW DO YOU FEEL ABOUT YOUR LIFE AS A WHOLE NOW?

_____1) Very satisfied
_____2) Mostly satisfied
_____3) Mostly dissatisfied
_____4) Very dissatisfied

19. FOR THOSE WHO WITHDREW FROM THE UNIVERSITY, FOR WHAT REASON(S) DID YOU LEAVE MICHIGAN STATE UNIVERSITY? FOR THOSE CURRENTLY IN SCHOOL, IF YOU MIGHT NOT FINISH SCHOOL NOW, WHAT MAY BE THE REASON(S)? CHECK AS MANY AS MAY APPLY. THEN GO BACK AND MAKE A SECOND CHECK BY THE MAIN REASON:

_____1) Achieved all I wanted from school
_____2) Family responsibilities
_____3) Personal health
_____4) Personal problems
_____5) Illness/death in the family
_____6) Job responsibilities
_____7) Too many roles
_____8) Not enough time
_____9) Lack of self-confidence
_____10) Lack of family support
_____11) Lack of support from others (Specify:)_____
_____12) MSU did not have the classes or the program I wanted
_____13) Needed a break or change
_____14) Finances
_____15) Academic difficulties
_____16) Problems with scheduling
_____17) Problems with faculty
_____18) Problems with university bureaucracy
_____19) Lack of interest in my classes
_____20) Moved out of the area
_____21) Other (Specify_____

20. TAKING ALL THINGS TOGETHER, HOW HAPPY WOULD YOU SAY THAT YOU HAVE BEEN DURING THE TIME YOU HAVE BEEN IN SCHOOL?

_____1) Very happy
_____2) Pretty happy
_____3) Not very happy
_____4) Very unhappy

21. IN GETTING THE THINGS YOU WANT OUT OF LIFE, HOW WELL WOULD YOU SAY YOU ARE DOING?

_____1) Very well
_____2) Adequately
_____3) Poorly
_____4) Very poorly

22. IN ASSESSING HOW YOU COPE WITH CRISES, HOW WOULD YOU SAY YOU HANDLE CRISES?

_____1) Very well
_____2) Adequately
_____3) Not very well
_____4) I am overwhelmed

23. HOW MUCH CONTROL DO YOU HAVE OVER YOUR LIFE?

_____1) Complete control
_____2) Much control
_____3) Little control
_____4) No control

24. PLEASE READ EACH STATEMENT. FOR EACH ONE, DECIDE WHAT YOUR NORMAL OR USUAL ATTITUDE, FEELING OR BEHAVIOR WOULD BE. USE THE FOLLOWING KEY TO INDICATE YOUR RESPONSE:

KEY: A	B	C	D	E
RARELY (Less than 10% of the time)	OCCASIONALLY (About 30% of the time)	SOMETIMES (About half the time)	FREQUENTLY (About 70% of the time)	USUALLY (More than 90% of the time)

_____1) When faced with a problem I try to forget it.
_____2) I need frequent encouragement from others for me to keep working at a difficult task.
_____3) I like jobs where I can make decisions and be responsible for my own work.
_____4) I change my opinion when someone I admire disagrees with me.
_____5) If I want something I work hard to get it.
_____6) I prefer to learn the facts about something from someone else rather than have to dig them out for myself.
_____7) I will accept jobs that require me to supervise others.
_____8) I have a hard time saying "No" when someone tries to sell me something I do not want.
_____9) I like to have a say in any decisions made by any group I am in.
_____10) I consider the different sides of an issue before making any decision.
_____11) What other people think has a great influence on my behavior.
_____12) Whenever something good happens to me I feel it is because I have earned it.
_____13) I enjoy being in a position of leadership.
_____14) I need someone else to praise my work before I am satisfied with what I have done.
_____15) I am sure enough of my opinions to try to influence others.
_____16) When something is going to affect me I learn as much about it as I can.
_____17) I decide to do things on the spur of the moment.
_____18) For me, knowing I have done something well is more important than being praised by someone else.
_____19) I let other peoples' demands keep me from doing things I want to do.
_____20) I stick to my opinions when someone disagrees with me.
_____21) I do what I feel like doing, not what other people think I ought to do.
_____22) I get discouraged when doing something that takes a long time to achieve results.
_____23) When part of a group I prefer to let other people make all the decisions.
_____24) When I have a problem I follow the advice of friends and relatives.
_____25) I enjoy trying to do difficult tasks more than I enjoy trying to do easy tasks.
_____26) I prefer situations where I can depend on someone else's ability rather than just my own.
_____27) Having someone important tell me I did a good job is more important to me than feeling I have done a good job.
_____28) When I am involved in something, I try to find out all I can about what is going on even when someone else is in charge.

25. DURING THE LAST THREE TERMS (OR LESS) THAT YOU WERE ENROLLED, WHICH WERE YOU PRIMARILY?

_____1) A full-time student
_____2) A part-time student
_____3) Both during the last three terms

26. WHAT IS YOUR TOTAL GRADE POINT AVERAGE? (AS CLOSE AS POSSIBLE)_____

27. WHAT WAS YOUR LAST ONE-TERM GRADE POINT AVERAGE? (AS CLOSE AS POSSIBLE)_____

5

28. WHAT WAS YOUR TOTAL GRADE POINT AVERAGE BEFORE YOU ENTERED COLLEGE THIS LAST TIME? (PLEASE GIVE THE MOST ACCURATE ANSWER POSSIBLE.)
_____1) (Number as close as possible) _____3) Cannot remember
_____2) None (No previous college)

29. IF YOU HAD COLLEGE CREDITS BEFORE YOU ENTERED THIS LAST TIME, WHETHER YOU CAN OR CANNOT REMEMBER YOUR GRADE POINT AVERAGE, WOULD YOU ESTIMATE YOUR GRADES SINCE RETURNING ARE:
_____1) Higher than before _____3) Lower than before
_____2) Approximately the same as now

30. PLEASE READ EACH STATEMENT. DECIDE WHETHER YOU AGREE OR DISAGREE WITH EACH STATEMENT AND TO WHAT DEGREE. INDICATE YOUR RESPONSE ACCORDING TO THE FOLLOWING KEY:

KEY: 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree

_____1) I feel that I am a person of worth, at least on an equal basis with others.
_____2) I feel that I have a number of good qualities.
_____3) All in all, I am inclined to feel that I am a failure.
_____4) I am able to do things as well as most other people.
_____5) I feel I do not have much to be proud of.
_____6) I take a positive attitude toward myself.
_____7) On the whole, I am satisfied with myself.
_____8) I wish I could have more respect for myself.
_____9) I certainly feel useless at times
_____10) At times I think I am no good at all.

THE NEXT THREE QUESTIONS ARE ONLY FOR THOSE WHO WITHDREW FROM MSU:

31. DO YOU INTEND TO CONTINUE YOUR EDUCATION?
_____1) Yes, at MSU by next fall _____4) Elsewhere by next fall
_____2) Yes, at MSU sometime _____5) Uncertain
_____3) Yes, somewhere, sometime _____6) No

32. DO YOU FEEL GOOD ABOUT YOUR DECISION TO LEAVE?
_____1) Always _____3) Occasionally
_____2) Usually _____4) Rarely or never

33. DO YOU WISH YOU HAD STAYED IN COLLEGE?
_____1) Frequently _____3) Occasionally
_____2) Sometimes _____4) Rarely or never

34. FOR EVERYONE: WHAT ELSE DO YOU THINK IS IMPORTANT TO KNOW IN A STUDY OF OLDER WOMEN WHO DO OR DO NOT COMPLETE AN UNDERGRADUATE DEGREE? (USE BACK IF NEEDED.)

_____

_____

_____

Name_____Student #_____

Street and Number_____Phone # (____) _____

City_____State_____Zip Code_____

Again, thank you so much for your help and cooperation. May you fulfill the hopes and dreams that brought you to MSU as an older student!

APPENDIX C

POST CARD

July 17, 1986

Dear Present or Former Woman Student,

Thank you so much for completing and returning the questionnaire we sent you last week. We are excited to be learning more of the experience of older women who return to school. It has taken a special kind of determination for you to have come back to school, however long you have been able to attend.

We know this may be a very crowded time for you, so we are especially grateful that you have taken approximately 15 minutes of your time to participate in this survey.

Sincerely,

Diana Algra, Director
Division of Women's Programs

Dorothy Mercer, Consultant

APPENDIX D

FOLLOW-UP LETTER

MICHIGAN STATE UNIVERSITY

We still need you!

DEPARTMENT OF HUMAN RELATIONS
WOMEN'S PROGRAMS

EAST LANSING • MICHIGAN • 48824-1046

We need more response yet from women in all categories and know the least as for of those who left MSU.

24 July 1986

Dear Older Present or Former Woman Student:

Two weeks ago we sent a questionnaire to all of you who were women undergraduate students at least twenty-five years old at Michigan State University during Fall term, 1984. So far we have not received a response from you, although we realize that you may have returned the survey anonymously or since this letter was written. This letter is being mailed anonymously to all on the original mailing list except those who responded giving their names.

We need your information if you're willing to participate to have as complete a picture of older women undergraduates as is possible. Results so far are beginning to draw an interesting picture, but it is possible that our understanding may change as we hear from more of you. We realize this may be a hectic time of year but hope you will find about fifteen minutes to complete this questionnaire.

If you have already responded, we thank you. In case you misplaced the survey, a second copy is enclosed. If you have questions or would like to talk about your experience, please contact Dorothy Mercer at 355-8270 or 371-4312. Thank you for taking the time in your busy lives to help us learn more about all of you.

Sincerely,

Diana V.R. Algra
Division of Women's Programs

Dorothy Mercer

Dorothy Mercer
Consultant

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