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DeStigter, Linda Lurie

**A COMPARISON OF PH.D. COMPLETERS VERSUS NON-COMPLETERS IN
ADULT AND CONTINUING EDUCATION AT MICHIGAN STATE UNIVERSITY**

Michigan State University

Ph.D. 1983

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A COMPARISON OF Ph.D.
COMPLETERS VERSUS NON-COMPLETERS
IN ADULT AND CONTINUING EDUCATION
AT MICHIGAN STATE UNIVERSITY

By

Linda Lurie DeStigter

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Administration and Curriculum

1983

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1983

ABSTRACT

A COMPARISON OF Ph.D. COMPLETERS VERSUS NON-COMPLETERS IN ADULT AND CONTINUING EDUCATION AT MICHIGAN STATE UNIVERSITY

By

Linda Lurie DeStigter

The purpose of this study was to examine the similarities and differences of selected characteristics of doctoral students at Michigan State University who are completers and non-completers of the Ph.D. in Adult and Continuing Education.

A questionnaire with thirty items was utilized in gathering data for this study. The questionnaire was refined into its final form following a pilot study.

There were 147 students identified who were completers and non-completers of the Ph.D. in Adult and Continuing Education at Michigan State University from 1970 to 1980. A total of 82 completed questionnaires were returned by 47 completers and 35 non-completers of the Ph.D.

The data gathered were analyzed in relation to the research questions. The "Statistical Package for Social

Sciences" (SPSS) was used for facilitating the statistical analysis.

The results of the analyses indicated that:

1. There may be a relationship between being married and completing the doctoral degree in Adult and Continuing Education at Michigan State University.

2. There seems to be a positive relationship between student's years of work experience in education and adult education and completing the Adult and Continuing Education doctoral program.

3. For Adult and Continuing Education non-completers the following factors seem to indicate problems in degree continuation:

- Financial situation
- Primary support group with family and colleagues
- Effective study habits

4. Most of the life change events addressed in this study do not appear to differentiate between completers and non-completers. The exceptions to this are "divorce," "death of a close family member," "pregnancy," "addition of a new family member," "son or daughter leaving home," or "outstanding personal achievement."

5. There may be a relationship with the number of times published and completing the degree.

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6. There appear to be some tangible ways for academic advisors and professors to facilitate students as they progress through the Adult and Continuing Education doctoral program.

7. There appear to be more students who were younger in the later 1970's than in the early 1970's.

8. Certain points on the path to completion of the doctorate appear to be more troublesome for some students than for others.

DEDICATION

This dissertation is dedicated to my husband, Kurt.

ACKNOWLEDGEMENTS

For his years of unending encouragement, confidence, and guidance, I dedicate this dissertation to Kurt, my husband.

Special appreciation and heartfelt thanks go to my major professor, mentor, and friend, Dr. Howard Hickey. For without his support and supervision this dissertation would not be possible.

A multitude of thanks go to my sister, Susan Palmer, for her help in gathering the initial data and disseminating this dissertation. Deep appreciation and thanks go to my parents, Sy and Iris Lurie, for believing in me and wanting me to succeed.

Lastly, a special thank you goes to the members of my guidance committee, especially Dr. Mildred B. Erickson, who was a major catalyst to my applying for the doctoral program in Adult and Continuing Education.

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CHAPTER I

STATEMENT OF THE PROBLEM

CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

Adult and Continuing graduate education has a relatively long history in the United States. In 1935 Wilbur Hallenbeck and William Stacy became the first students in this country to receive doctoral degrees in adult education (Houle and Buskey, 1966). Ten years later, only 14 doctorates had been granted in this field throughout the entire country. During the Second World War, the number of graduate courses available in adult education actually declined (Houle, 1964). After the war, however, the number of doctoral degrees granted in the United States took a major leap forward until, during the five-year period between 1961 and 1966, over 246 such degrees were granted (Kreitlow, 1970). By 1968, adult education was a fully developed field of graduate study. It was offered in at least 20 universities in the United States and Canada, and by the end of that year 726 Ph.D.'s and Ed.D.'s had been granted (Houle, 1970).

Until the rise of adult graduate education, the knowledge and practice used in educating adults was borrowed from the education of youth. Then, in 1926, the American Association for Adult Education was founded for the development of a body of knowledge about the education of adults (Jensen, Liveright, and Hallenbeck, 1964). Dean James Russell of Teachers College, Columbia University, was active in creating this American Association of Adult education. Edward L. Thorndike, also from Columbia, studied adult learning and adult interests (Houle, 1964). These men, along with others who eventually joined them, adapted knowledge from the theories and research efforts of varied disciplines to make up the content of adult and continuing education (ACE).

Graduate programs in ACE did not spring up quickly in the United States. The term "adult education" as part of a course title appeared for the first time at Columbia University in 1922 (Houle, 1964). Scattered courses were offered by a few universities beginning in the 1930's (Jensen, Liveright, and Hallenbeck, 1964). In 1935 Columbia University became the first institution to graduate doctoral students in adult education, the recipients being Hallenbeck and Stacy. Later, towards the end of 1935, Ohio State University and the University of Chicago became the second and third institutions, respectively (Houle and Buskey, 1966). Since that time, ACE has grown into a reasonably

uniform curricula offered by many universities on a doctoral level (19 by 1970) and on an M.A. level (over 30 by 1970) (Schroeder, 1970).

The special concern of this study relates to doctoral students in adult and continuing education at Michigan State University (MSU) who are both completers and non-completers of the Ph.D. According to Houle (1962), the first doctoral student graduated from MSU in 1956. Since that time a significant number of degrees have been granted. In examining the former participants in doctoral programs several questions come to mind. Are there any significant characteristics which could be attributed to those students who complete the Ph.D. and those who do not? What problems were encountered by the doctoral students during the process of degree completion? Of these problems discovered, were any significantly related to whether the graduate student was a completer or non-completer of the Ph.D.

A recent study by Meisner, Parsons, and Ross describes some of the characteristics of graduate students in ACE (1979). The authors explain that in previous years students in the field of adult education were predominantly male and older than graduate students in other fields. Now, apparently, there is a new trend. Present graduate students in ACE are younger than in past years and closer in age to other graduate students. Also, the graduate programs now serve approximately half women and half men. These authors

examined such characteristics as areas of past degrees, work experience, the geographic areas the students are from, jobs desired, and other such factors.

Meisner, Parsons, and Ross, among others (Gleason, 1963; Johnston, 1961 and Wetherill, 1960), have contributed to the growing body of literature on graduate students in Adult and Continuing Education (ACE). This study adds to that information by examining not only the similarities and differences of the characteristics of graduate students, but also the special problems that they encounter while in doctoral programs. It is suspected that some difficulties will be found in loss of personal motivation, communicating with dissertation advisors, physical health problems, and current employment status. Do more problems develop as the student progresses from course work to proposal writing to research and dissertation completion, or does the student encounter problems that are more of a personal than academic nature? These questions and others will be examined and discussed in this study.

Purpose of the Study

The purpose of this study is to examine the similarities and differences of selected characteristics of former doctoral students at MSU who are completers and non-completers of the Ph.D. in Adult and Continuing Education.

Design of the Study

Population

The population for this study consisted of two groups:

1. Completers of the doctorate in Adult and Continuing Education at Michigan State University (MSU) from 1970 to 1980.

2. Non-completers of the doctorate in Adult and Continuing Education at MSU from 1970 to 1980.

3. Completers and non-completers in Adult and Continuing Education comprised the entire population of the study.

Methodology

The Graduate Student Affairs Office at MSU provided the lists of all doctoral student enrollees and graduates in ACE from 1970 to 1980. Current addresses for the subjects were obtained from the Graduate Student Affairs Office, alumni records, the Registrar's Office at MSU, and individual academic advisors.

Each student was contacted at his or her current address and asked to fill out a questionnaire, consent form and postcard, if desiring results of the questionnaire.

Survey Instrument

A structured questionnaire was developed based on a selected literature review of characteristics of graduate

students who were completers and non-completers of the doctorate in ACE and Education in general.

Assumptions of the Study

The following assumptions provided the basis for this study:

1. All subjects in this study will be pursuing or have pursued the doctorate (Ph.D. or Ed.D.) in Adult and Continuing Education (ACE) from Michigan State University.
2. The graduate student population consisting of completers and non-completers of the Ph.D., will be drawn from those students who were enrolled at MSU from 1970 to 1980.
3. There is a general guideline at MSU that the graduate student completers and non-completers will have no more than eight years to complete their entire program of doctoral study. This includes no more than three years to complete the proposal and dissertation after completing comprehensive examinations (Michigan State University Publication, 1974). Two studies appear to confirm the time limit chosen as a parameter (Report of Special Committee, 1975 and Manuel, 1966). One, at the University of California, shows that the normative time to degree is four to five years including two years for the dissertation period. Another study at Indiana University has found that when students make little progress toward completing the dissertation within the given time limits, it is unlikely that

they will complete the doctorate. So, use of the three year time period after completing comprehensive examinations seems to be a reasonable criterion for distinguishing between students who will complete the degree and those who could continue in their doctoral studies indefinitely or fail to complete the doctorate.

4. One or more of the following criteria will fit graduate students who are non-completers: a) failure to complete course work requirements but enrolled for a minimum of one term; b) failure to take or successfully complete comprehensive examinations; c) failure to complete the dissertation proposal; d) failure to complete the dissertation; and e) failure to successfully complete final oral examinations in defense of the dissertation.

5. The doctoral students designated as the completers will have finished their course work, comprehensive examinations, the proposal, dissertation and defense of the dissertation within the specified time limits of this study.

Need for the Study

There are two groups who have an immediate need for this study. The first group, graduate students in Adult and Continuing Education (ACE), have a need for this information. Professors and academic advisors of graduate students in ACE also need to be aware of the findings in order to serve their students better. Doctoral students in ACE can benefit from knowing how they compare to other doctoral students.

There is a need to know the typical problems both completers and non-completers face. Students who learn about others like themselves can profit by the results and be aware of which avenues to pursue and which directions to avoid. Study results will enable professors and academic advisors in ACE to be better prepared to assist, advise, and encourage doctoral candidates. They will know how other students fared; they will be more aware of pitfalls and more knowledgeable about alternative solutions.

Significance of the Study

The study is significant for a number of reasons. As an empirical research study it will add to the body of literature in the field of adult education; it will have special significance for professors and academic advisors of doctoral students in ACE at MSU; the findings will be beneficial to professors and academic advisors in graduate education and in graduate schools as a whole; graduate students in ACE at MSU and other doctoral granting institutions will be aided as a result of knowing more about others in similar situations; the many Ph.D. or Ed.D. graduate programs in ACE in the United States will benefit from findings of the study.

Limitations of the Study

The limitations of this study are as follows:

1. The student records of the Graduate Student Affairs Office, professors and academic advisors, alumni files and the Registrar's Office may not be accurate and up-to-date.
2. The validity of this study is affected by the questionnaire return rate and by the sincerity and frankness of questionnaire responses of the subjects.
3. The findings are correlational, not causal.
4. The subjects in this population include graduate students from 1970 to 1980, and may be unrepresentative of graduate students in ACE at MSU preceding and following that period of time.

Definition of Terms

Social Readjustment Rating Scale (SRRS) - This scale is also known as the Life Change Check List. It measures major life change events that occur to adults in relationship to the onset of stress and illness. Individual pre-selected life change events are examined in this study to determine their impact on doctoral student completers and non-completers.

Completers (C's) - students who have successfully obtained their Ph.D. or Ed.D. at Michigan State University in Adult and Continuing Education between the years 1970 to 1980.

Non-Completers (NC's) - students who have been enrolled for a minimum of one term in the doctoral program of Adult and Continuing Education at Michigan State University but have not obtained their degrees during the period between 1970 to 1980.

Interrupted - this refers to doctoral students in Adult and Continuing Education who have "stopped out" of their degree programs for an undefined amount of time.

Michigan State University (MSU) - the University from which the population of this study came.

Adult and Continuing Education (ACE) - the focus of this study is limited to doctoral student completers and non-completers majoring in Adult and Continuing Education within the Department of Administration and Curriculum at Michigan State University.

Overview of the Study

Chapter II will include a selected review of the literature dealing with the history and nature of ACE and the characteristics of doctoral students who are completers and non-completers within the programs of ACE and Education.

Chapter III describes the research methodology used to develop and analyze the study, procedures for designing the study, the development of the questionnaire, and data collection and analysis.

Chapter IV presents a review of the results of the questionnaire and an analysis of these results.

Chapter V presents discussions, conclusions, and recommendations based on the findings of this study.

CHAPTER II

REVIEW OF THE LITERATURE

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This chapter will concern itself with two general topics. The first topic will be doctoral programs in Adult and Continuing Education. Included in the discussion will be the history of ACE doctoral graduate study, general trends in graduate study and the characteristics of the doctoral student population. In addition, the nature of ACE doctoral programs will be examined. Although doctoral programs in ACE from all over the United States and abroad will be discussed, particular focus will be upon Michigan State University's (MSU's) Program of Study in Adult and Continuing Education.

The second topic of the literature review will be in the broad area of doctoral student completers versus non-completers. Many studies are available on the variables that predict graduate student success. Since there are not many studies in the specific area of Adult and Continuing Education (ACE) the broader area of graduates in the department or college of Education will be examined. Selected

characteristics of the doctoral students in these programs will be reviewed to determine what impact they might have had on student completion or non-completion of a doctoral degree.

Historical Overview of ACE Doctoral Programs

The history of ACE graduate programs has a fairly long chronology in the United States. The very first university to use the words "adult education" in a graduate school course title was Columbia University in 1922 (Houle, 1964). Several years later, in 1930, building on the requests and interests of their faculty, Columbia also created the first formal adult education department. The department was chaired by John D. Willard, who became the first full-time faculty member in the field of adult and continuing education. In 1935, Columbia University granted Wilbur Hallenbeck and William A. Stacy the first doctoral degrees in ACE (Houle and Buskey, 1966, and Houle, 1964).

ACE graduate programs most typically developed in universities through the gradual growth of earlier course offerings into a sequence of study (Houle, 1964). Less typically, full-fledged programs of study were established before widespread use of courses were available in adult education within the school or college (Houle and Buskey, 1966). Each university organized itself in its own way. Some schools identified adult education as a separate field,

some as aspects of education administration, curriculum or both. Some had interdisciplinary study sponsored by a committee or several departments. Graduate programs in adult education are usually housed within the schools of education, however (Dickerman, 1964). In addition, there are many universities that grant a doctorate in adult education but not through established graduate programs. For example, the graduate student designs his or her own program of study focusing on adult education as the major theme throughout the program. The student then attains the actual degree outside a formal program of studies in adult education. The universities in the United States that offer certified doctorates secured on this basis are Denver, George Washington, Howard, Illinois, Iowa State, Kansas, Missouri, Nebraska, Northwestern, Pennsylvania State, Pittsburgh, Stanford, Tennessee and Texas (Houle, 1964).

The development of adult education graduate programs took shape much the same way outside of the United States. That is, gradual development of programs came about through earlier course offerings which grew into a sequence of study. Canada and Yugoslavia were two of the first countries outside of the United States with known doctoral programs in adult education (Houle and Buskey, 1966). In Canada, a number of special offerings were available at various universities from time to time. The University of British Columbia, however, offered the first full-scale program in 1957.

In Table 2:1 is a list of all of the universities in the United States that have offered full-fledged doctoral degrees in adult education prior to 1962 as well as the cumulative total of doctorates from each institution (Houle, 1964).

Table 2:1 Doctorates in Adult Education, by Institution,
January 1, 1962¹

Institution	Year of First Doctorate	Total Number of Doctorates
Columbia University	1935	78
University of Chicago	1940	32
University of Pittsburgh	1942	1
Ohio State University	1945	9
University of California (Los Angeles)	1947	21
University of Illinois	1948	1
University of Michigan	1948	15
Cornell University	1949	32
University of Buffalo	1953	3
Northwestern University	1953	1
University of Wisconsin	1953	66
Indiana University	1954	8
State University of Iowa	1954	2
Stanford University	1955	1
University of Tennessee	1955	1
University of California (Berkeley)	1956	12
University of Denver	1956	2
Florida State University	1956	6
University of Kansas	1956	1
Michigan State University	1956	12
University of Nebraska	1956	1
New York University	1956	8
Texas Technological College	1956	2
Harvard University	1958	1
Iowa State University	1958	1
University of Missouri	1958	1
Syracuse University	1958	2
University of Texas	1959	1
George Washington University	1959	1
Pennsylvania State University	1960	1
TOTAL		323

¹Adult Education, XII (Spring, 1962), p. 132.

As Table 2:1 shows, between the years 1935 and 1961, there were 323 degrees awarded in Adult and Continuing Education. By the year 1962, 15 universities in the United States had active programs leading to advanced degrees (Houle, 1964). Houle (1970) reports that by 1968 there were 20 universities actively granting doctoral degrees in ACE, an increase of five universities in a relatively short number of years.

In a study completed in 1976 Davis found that from 1960 to 1975, 39 adult education doctoral programs were offered within the United States. Of these, it was found that there were 92 full-time faculty and 1,460 students in doctoral programs. Those programs with the largest enrollment did not necessarily have the greatest number of faculty members. Of the professors of adult education who had completed their doctorates, 64% of the full-time and 47% of the part-time faculty had their degrees specifically in the area of adult education (Davis, 1976).

Ford and Houle (1980) in a recent update reported that by 1978 there were a total of 2,239 doctorates in adult and continuing education, an enormous increase over the number of graduates from former years. Houle and Ford then listed the names of doctoral student graduates for the years 1976, 1977, and 1978. During these years there were 175, 163, and 183 students who attained doctoral degrees, respectively. It is interesting to note that during the last few

years there has been a relatively slow growth rate in ACE doctoral programs. Yet, doctoral student graduates have increased significantly since the first graduate in 1935, and especially in the past two decades (Meisner, Parsons and Ross, 1979).

At Michigan State University, the first formal graduate program was established in adult education in 1955. Harold Dillon was appointed to organize and direct the program within the College of Education (Houle, 1964). By 1956, Houle reported that Michigan State University had 12 graduates in this area. Unfortunately, there appears to be no readily available record to substantiate the total number of doctoral candidates to date at MSU (Hickey, 1981). However, there were nearly 140 graduate students enrolled in doctoral studies in ACE between the years 1970 to 1980. One of the goals of this study is to look at doctoral students in ACE at MSU to determine if the students have the same general characteristics as those in other universities across the United States. It is suspected that the general trend will be the same at MSU, although student information will only be available from 1970 to 1980 and not the preceding years, which could limit generalizability.

Doctoral Students in ACE

There would seem to be a trend in the student population in doctoral programs in adult and continuing education (Dickerman, 1964 and Meisner, Parsons and Ross, 1979). In

1965, Houle and Buskey undertook a study with doctoral students in adult education in all the major degree granting institutions in the United States. They generated the students' names via their major professors at these various universities. Of a total of 556 doctoral recipients, 294 (61.3%) hold Ph.D.'s and 186 (38.7%) hold Ed.D.'s; 400 subjects were male (83.3%) and 80 (16.7%) were female. The mean age of doctoral recipients in 1965 was 46.7. When asked why they chose a degree so late in life, the most frequent response was that they did not become interested in adult education until after many years of work experience in the field (Houle and Buskey, 1966).

Meisner, Parsons and Ross (1979) described the most recent doctoral recipients in adult education in a study using 291 subjects randomly selected at 12 universities across the United States. In this study the typical graduate student in adult education was female, married, White, with two brothers or sisters, and came from a childhood in a non-metropolitan area. The predominance of females in the study was slight, but definite at 51.9%. The predominance of married respondents was 71%, with 21% single and 7% divorced. Racial composition consisted of 84.9% White, 8.7% Black, 3.7% Oriental, 0.5% Indian and 2.3% other. The largest range of students were between 29 and 34 years old, with the 34 to 43 age range being the second largest group. The typical graduate student came in with five years of experience in general education, including university teaching,

adult basic education, health care, cooperative extension, and government agencies. Meisner and others concluded saying that graduate programs in ACE used to include students who were male and older. This study showed that the new graduate students in ACE are more likely to be younger, and about as many female as male. Also, students are coming in with recent Education degrees and less years of experience.

Ross (1978) in a study using the same sample population as above, examined why students enroll in doctoral programs in adult education. She concluded that some of the variables highly influential in the students' decision to major in adult education were: desire to become a better informed person, personal enjoyment, goal orientation toward a degree, national trends in education, employment status, and desire to work with mature students. Of paramount concern to this author is Ross' recommendation that further research on life stages be examined as a possible reason for graduate students enrolling. The present study will look at selected life stages as determined by Holmes and Rahe (1967) in the Social Readjustment Rating Scale. More will follow on this topic in Chapter III.

Karelius (1982) examined the early development (ages 22-32) of women and men who enrolled in graduate school during the age thirty transition and investigated their motivation for enrollment. Although the group she examined were masters degree candidates there does appear to be

information relevant to the present study. Using a population of 37 persons, 19 women and 18 men, who assessed the life dream, important life activities, and the relative importance of career, relationships with others, and personal development. Relating Karelius' study to graduate education, it was found that men and women enrolled in graduate school for similar reasons often related to career development. The majority of participants had recently been through a transition in their lives and graduate enrollment was seen as a way to consolidate those changes by either increasing career options, enhancing self-discovery or building self-esteem. More men than women perceived graduate school as helpful in making changes in their lives, primarily for reasons of a better job or enhancing self-discovery.

Nature of Adult and Continuing Education

The graduate field of Adult and Continuing Education (ACE) encompasses a very broad range of areas. Hallenbeck (1964) preferred to visualize the field as consisting of three different dimensions. The first dimension is institutional, which consists of the different physical locations where one may have adult and continuing education. Included here are: public schools, universities and colleges, agriculture extension, independent and residential centers, proprietary schools, libraries, museums, health and welfare agencies, business and industry, governmental agencies,

labor unions, mass media and communications, religious institutions, and voluntary associations.

The second dimension to the graduate field of ACE, according to Hallenbeck, is content. This is what may be included, but not limited to, in any type of adult and continuing education enterprise. Thus, a doctoral graduate student in adult education may have come from or go to an ACE program in the following content areas:

- Academic education
- Education for aging
- Community Development
- Community education
- Creative arts
- Economic Education
- Fundamental and literacy education
- Health education
- Home and family life education
- Human relations and leadership training
- Intergroup education
- Liberal adult education
- Occupational education
- Public affairs education
- Recreational education
- Science education

Finally, Hallenbeck described the third dimension of ACE as being geographical. Here the various adult and continuing education activities could occur on a national, state, and community level. A few examples of each geographical level follows:

Community level: Adult educational activities in the community such as evening schools and colleges, YMCA's, churches, and business conference rooms.

State level: The state may offer programs for consumers of adult education in universities and agricultural extension divisions, and in certain health and welfare organizations. Others include state departments of education, state libraries, and numerous state voluntary associations.

National level: Adult education activities include national voluntary organizations, professional adult education associations, and federal agencies (e.g. Department of Agriculture, United States Office of Education).

The late Russell Kleis, a leader and professor of adult and continuing education at MSU, outlined what he believed a doctoral student must take into consideration when planning a program of studies. Kleis maintained that:

Planning an appropriate program of study in continuing education requires special care. This is true because of the breadth of the field, diversity of functions to be performed, differences among individuals and communities to be served, and variety of institutions engaging in the enterprise (Kleis, Dimensions of Planning, Michigan State University, Mimeographed and Undated).

In addition, Kleis urged the doctoral students in ACE at MSU to consider three questions when planning a program:

- 1) What is likely to be the Institutional base of support?
- 2) What basic functions will be needed to perform on the job?
- 3) What clientele will likely to be served?

To further conceptualize what Kleis included in these questions, the following is a listing of each planning dimension:

Institutional base for work:

Business and industry
 Cause or special interest group
 Church or faith based institution
 College or university
 Community school
 Cooperative and mutual benefit associations
 Correctional institutions
 Creative or performing arts
 Governmental agencies
 Hospitals or health centers
 International agency
 Library
 Mental health facility
 Military organization
 Professional society
 Rehabilitation institution
 Residential adult education center
 Social service agency
 Union organization
 Veterans facility
 Voluntary association, etc.

Basic functions to perform:

Administration
 Advocacy
 Career Development
 Communication
 Community Development
 Consulting
 Counseling
 Institutional Development
 Materials Development
 Political action
 Profession building
 Program development and evaluation
 Project management
 Proposal writing
 Rehabilitation
 Research and writing
 Staff development and evaluation
 Teaching
 Training
 Writing

Clientele likely to serve: categorized into four segments of the population differentiated by:

- A. Their shared role within the community, e.g., aged or aging, church members, citizens, consumers, females, influentials, males, minorities, parents, unemployed, volunteers, or workers.
- B. Their orientation toward education, e.g., advanced, alienated, dependent, eager, neglected, obsolete, persistent, receptive, resistant, or self-directed.

- C. Their place of residence or work:

inner city	migrant
rural	permanent
suburban	institutionalized
urban	

- D. Their dominant education purpose:

avocational
 basic or fundamental
 career development
 civic understanding
 consumerism
 correction
 credential earning
 family life
 liberal
 physical or mental health
 professional updating
 recreation
 rehabilitation
 religious
 remedial
 role fulfillment
 self-development
 social change
 vocational
 (Kleis, Dimensions of Planning, MSU,
 Mimeographed and Undated).

Liveright (1964) maintained that "a sound and comprehensive program in adult education should include work in fields of history, psychology, social psychology, sociology, economics, political science, philosophy, and administration." Jensen, Liveright, and Hallenbeck (1964) expounded on this concept by explaining how adult education borrows

knowledge, theory, and research technology from many other disciplines. The following excerpt clearly illustrates how adult education has borrowed from other disciplines:

From individual and social psychology basic knowledge about the processes of learning and change in individuals, groups and communities has been selected. Philosophy has been used to gain an understanding of the ethics and rationale of the field of adult education and suggests some of its content, processes, and objectives. From sociology has come specific knowledge about human social organization as it influences and relates to adult learning, as well as insight into the essential functions of adult education in the maintenance and development of society. History has provided a perspective of man's relationship to himself and to society, along with a broader understanding of the endless human quest for knowledge. Anthropology has contributed experience relating to the introduction and acceptance or rejection of change in ideas or technology. Economics has provided information about the relationship between human competence and societal well-being, as well as principles for the sound use of resources for lifelong learning (Jensen, Liveright, Hallenbeck, 1964).

With the foregoing as a description of the kinds of possibilities included in graduate programs in adult education, Kleis enumerated the eight common goals identified that represent, in general terms, professional development in ACE (Kleis, 1977):

1. To understand the significance, development, structure and scope of continuing education, both formal and non-formal.
2. To be able to interpret continuing education needs, aspirations and potentials in individuals, organizations and communities.
3. To be able to design appropriate continuing education programs in a wide variety of individual, group and community and/or national developmental situations.

4. To be able to facilitate the operation of continuing education programs that are humane, ethical, effective and efficient.
5. To be able to evaluate continuing education programs.
6. To understand social systems to be effective in pursuing human purposes in and through them.
7. To become exemplars and leaders in adult phases of lifelong learning.
8. To develop reasoned personal and professional philosophies.

Veri (1968), in a dissertation designed to ascertain what adult education doctoral programs should consist of, reviewed past literature as well as a random sample of 100 professional adult educators. On the basis of his findings, the following subject areas were recommended for inclusion in doctoral programs in Adult and Continuing Education (ACE):

- I. Core Experiences - All about the various areas of adult education e.g. sociology, history, and design.
- II. Generalist Producing Experiences - Organization and administration of adult education agencies, methods and media in adult education, educational psychology, research techniques, and social psychology.
- III. Administrative Specialist Producing Experiences - including public relations, personnel administration, budget development, and community and organizational planning.
- IV. Teaching Specialist Producing Experiences - interpreting seminars in adult education, contemporary educational trends, philosophy of education, etc.

- V. Research Specialist Producing Activities - statistics methods, research design in education, advanced statistical methods, sociological research, design and analysis, and sociology of small groups, etc.

As a general statement, Grosz (1976) found that doctorates in adult education have a great deal of commonality. He sampled 259 subjects between the years 1972 and 1974, all of whom were in ACE programs throughout the United States. The responses of students indicate that faculty members in adult education encouraged their students to plan their own programs to meet their self-determined objectives and that furthermore, this intensive faculty and student communication and planning have proved highly satisfactory to graduate students in meeting their needs.

Doctoral candidates admitted to MSU in ACE are asked to develop their program of study to encompass seven major areas of concern. Kleis listed these areas of concern and emphasized that they should be a solid part of each graduate student's curriculum (1977):

1. Major subject area whether it be in adult and continuing education, community education, extension or non-formal education.
2. Functional and institutional area of emphasis. The specialty area that provides the setting and actual work in that setting, e.g., university extension teaching, adult public school administration, adult basic education, and counseling.
3. General professional area. This includes the social and philosophical base of education, the processes and problems of human learning, and the management of the educational enterprise.

4. Related studies area. Adult and continuing education is often instrumentally related to other fields of professional practice, usually outside the field of education.
5. Research competence area. This includes philosophical and methodological preparation to do research in adult and continuing education.
6. Research and dissertation area. Propose, design, conduct, report, and defend a research project.
7. Liberal learning area. Invest time, energy, and money in liberal learning experiences to grow as a free and responsible person, and share significant experiences with family and friends.

It is important to note, however, that many of the actual programs developed for the graduate students at MSU did not strictly follow Kleis' model, although it was a foundation from which to plan. In addition, all doctoral students in ACE at MSU were required to fulfill a residency requirement to include a full six hours of course work taken for each of three sequential terms. Finally, each doctoral student took comprehensive examinations when near completion of formal course work. The comprehensive examinations:

demonstrate knowledge of theory and practice in the field of continuing education and in related fields and samples such major components of the field as theories and strategies for change, program development and renewal, history, social and philosophical foundations, management functions, and contributions and contributors to the profession (Kleis, 1977).

Michigan State University (MSU) offers two doctoral degrees in adult and continuing education: the Ph.D. and Ed.D. Whereas both degrees are committed to high levels of

scholarship and excellence, the differences between the two degrees are substantive and not qualitative. "The Ed.D. emphasizes excellence in practice, critical examination of experience, and derivation of disciplined conclusions from it. The Ph.D. emphasis is upon knowledge through theoretical research, teaching, and writing (Kleis, Majors Available in Continuing Education, undated). It should be noted, however, that the differences become moot, since over 95% of all doctoral students take the Ph.D.

Doctoral Student Completers and Non-Completers

This section categorizes doctoral student completers and non-completers by their respective academic majors including adult and continuing education and the broader field of education as a whole. The reason for this categorization, as Dickerman (1964) noted, is that "graduate programs in ACE are usually housed within the schools or colleges of education." Since doctoral students in ACE take many of the same courses as doctoral students in education and since adult and continuing education is usually housed within the school or college of education, generalizability would appear to be valid. One of the goals of this study is to be able to make valid statements about doctoral students who are completers and non-completers in ACE. It is believed that by using these two major areas in combination, that generalizability will be possible. Therefore, a selected review of the literature will follow.

Larry D. Pristo (1977) appeared to be the sole author to research prediction of success in the area of adult and continuing education (ACE) doctoral programs. For the study he used all applicants admitted to doctoral programs at Arizona State University in the Adult Education Department, including both Ph.D. and Ed.D. candidates, between the years 1966 and 1977. Of the total number of 129, 46 were female and 83 male, with 58 students classified as successful, 25 as failures and 46 as still active in the doctoral program. Pristo sent out questionnaires to all subjects in the study and received 60 usable returns. He used four criteria in the study, including: 1) success or failure in the program, 2) cumulative GPA (at the end of the doctoral program, 3) type of degree (Ph.D. or Ed.D.), and 4) general identification of job field, e.g., there were four main fields of employment from which students described their present position. Pristo then selected 21 variables, obtained through a review of the literature, to analyze in conjunction with the four criteria.

The 21 variables used by Pristo were 1) GRE-V (Graduate Record Examination - Verbal), 2) GRE-Q (Quantitative), 3) GRE-T (Total), 4) MAT (Millers Analogy Test), 5) years since receipt of last bachelors degree, 6) years since receipt of last masters degree, 7) any graduate GPA not within degree program, 8) GPA in masters program, 9) the holding of a masters degree, 10) type of college the masters degree was received in, 11) type of college the

bachelors degree was received in, 12) total number of graduate hours upon entrance to the program, 13) a rating of the undergraduate institution conferring the degree held (the ratings assigned to graduate and undergraduate institutions were those established by the authors of Where the Colleges Rank, 1973), 14) a rating of the graduate degree conferring institution, 15) sex of subject, 16) age at time of being accepted to program, 17) total number of colleges and/or universities attended, 18) undergraduate GPA, 19) junior and senior GPA, 20) major undergraduate GPA, and 21) number of other doctoral programs at Arizona State University that the student was either accepted or not accepted into.

The only significant results that Pristo found were with two variables: time since bachelors degree and final graduate GPA when matched with the success or non-success criteria. None of the other variables showed discriminatory ability with regards to successful and non-successful students. His two major conclusions were 1) that any particular test will be ineffective in predicting some student performance because variables other than those being measured may enter into prediction, and 2) that the requirements of doctoral programs with the adult education department may not be stringent enough; people of low ability, as indicated by their previous academic records, can succeed within the program. Given this, one cannot establish

predictive validity of everyone if they all can complete requirements for the doctoral degree.

Pristo used two cononical correlations and factor analysis to examine the relationships between predictor variables and criteria. All of this analysis was inconclusive. The second factor analysis suggested eight factors responsible for most of the variance in variable sets, indicating a redundancy of measures (high correlations). A series of regression statements concerning success demonstrated no predictive validity when cross-validated or corrected for shrinkage.

Clearly, Pristo's main weakness was in the statistical analysis he used. Again, his data analysis to determine the relationship of predictors and criteria was ineffective. The present author's study will use statistical techniques that hopefully demonstrate predictive validity and ease in analysis. In addition, the present study will use many of the variables and criteria that Pristo incorporated.

Bundy (1968), investigated the possibility for predicting doctoral student success in education at the time of admission to the program. The following selected predictors were used: age, GPA in masters program, location of B.A. and M.A. institutions, type of B.A. and M.A. institutions, areas of study in the B.A. and M.A. programs, and type of education experience and sex. Bundy randomly selected from students admitted to doctoral programs in the

School of Education at University of Southern California between the years 1953 to 1957. For each sample a multiple regression was carried out between program completers and non-completers. Bundy found that there was considerable disagreement in the literature regarding the effectiveness of methods to predict success defined as completion of the graduate degree. He concluded that 1) attrition and time lapse in doctoral programs appear to be critical areas, 2) there is no significant relationship between the predictors used in his study and success in doctoral programs in education and 3) the specific factors that make for success in doctoral programs have not yet been conclusively determined. Among Bundy's recommendations are that a study should be undertaken to include such objective evaluations as a score of persistence measured by B.A. and M.A. time lapse. This writer's study will incorporate Bundy's suggestion.

Gleason (1963) looked at completers and non-completers in education doctoral programs at a Texas university to determine certain factors associated with successful completion of the degree. Gleason administered a Q-checklist to develop a composite of 36 factors obtained through the consolidation of opinions of the population sample concerning success in doctoral programs. The conclusions were that graduates considered their ability to isolate, define, and research a problem more important than did non-graduates;

whereas non-completers found physical health and effective study habits more important than completers. The graduates tended to receive better grades than the non-completers, and, finally, there was no significant relationship between undergraduate GPA and success in doctoral studies.

Johnston (1961) also examined factors related to success in doctoral programs. She used a population of 327 subjects, all of whom were applicants to a university's school of education, and classified them as completers and non-completers. Methodology included comparing a group of completers to a group of non-completers to see if there were significant differences on four screening variables. The screening variables were: 1) undergraduate GPA, 2) graduate GPA, 3) scores on the General Association Test, and 4) recommendation letters in seven areas. It was found that there was a significant difference ($p \leq .05$) in the recommendations in favor of the completers. On all other variables there was no significant difference between the groups. Johnston then compared the groups on the basis of 20 variables and found the following significant at the .05 level: 1) there was a greater proportion of female completers than male, 2) a greater proportion of completers than non-completers planned to undertake doctoral studies as full-time students, and 3) completers had more experience in education than non-completers. In addition, she found the following factors significant at the .01 level:

1) a greater proportion of single than married students graduated from the program, 2) a greater proportion of the completers were staff members of the school of education than the non-completers, and 3) a greater proportion of completers than non-completers had two different advisors. Using analysis of variance and chi square as statistical tools, Johnston concluded by reiterating that there are identifiable factors related to success in the school of education.

In 1966, Kerr examined selected background factors of degree and non-degree doctoral students to determine if there were distinguishable factors which appeared to differentiate between the two groups of students. He compared 155 completers and 133 non-completers majoring in five areas of education during the years 1960 to 1964. The five academic areas of specialization were: 1) school administration, 2) secondary education, 3) elementary education, 4) vocational education, and 5) educational psychology. There were three controls for academic ability which were: 1) GPA of 3.5 or higher, 2) MAT (Millers Analogy Test) score of 49 or above, and 3) the Ohio State University Psychological Examination. Kerr concluded that it was possible to differentiate between completers and non-completers in every major area of specialization -- but not necessarily with the same set of variables. The only significant areas in favor of the degree group were: 1) GPA in initial work beyond masters, 2) GPA in all work beyond masters, and 3) receipt of

fellowship, assistantship or scholarship. In contrasting the entire group of completers and non-completers, differences significant beyond the .001 level were found on all academic measures. Primary conclusions were twofold:

1) that the GPA for masters degree work is relatively more effective in distinguishing between degree and non-degree doctoral students in education than the GPA for the last two years of undergraduate school, and 2) the establishment of minimum cut-off points on any variables would exclude some individuals who previously would have been successful in the doctoral program, unless their cut-off points were set so low as to be virtually meaningless.

Colvin (1968) studied a group of 83 graduate students in education to determine the value of 24 selected variables in the prediction of graduate GPA in education and non-education courses. His findings showed that 6 of the 24 predictor variables demonstrated first-order correlation coefficients which were statistically significant: 1) GRE-Quantitative, 2) Advanced Education Test, 3) undergraduate composite GPA, 4) graduate composite GPA, 5) education GPA, and 6) non-education GPA. Colvin concludes that the best non-GRE predictor of graduate academic success was the undergraduate GPA in education courses taken during the last 30 undergraduate hours. In addition, Colvin recommends that the college of education continue to welcome those qualified and dedicated students whose masters degrees were in non-education fields.

In a study by Thom and Hickcox (1975), a different sort of approach was taken. The purpose of this study was to determine the relative effectiveness of three types of selectors (i.e. previous academic success, MAT, and letters of recommendation) on new graduate students admitted to an educational administration program. Thom and Hickcox enlisted three groups of subjects to evaluate success of graduate students in educational administration programs. The three groups of respondents were educational administration faculty, N = 25; practicing principals, including vice principals, N = 35; and full-time graduate students in educational administration, N = 25. Results of data analysis indicate that there are no differences in how accurately faculty members, principals or graduate students in educational administration predict success of a group of applicants for educational administration programs. In particular, there are no differences in how accurately these three groups predict any of the three aspects of success in educational administration (i.e. academic, career and administrative success). Further, data analysis indicates that applicants' transcripts, MAT scores, letters of recommendation and resume are of relatively good value in predicting academic success. Results demonstrate that letters of recommendation and resume are relatively useful in predicting career success. It was determined that there were no statistically significant differences in selection effectiveness among the three groups of respondents.

Manuel (1966) studied graduate students in the school of education at a midwestern university over the years 1948 to 1961. The purposes of the study were to obtain opinions and assessments from graduate students of their graduate preparation programs at the doctoral level and determine why graduate students did not complete their degree programs. Questionnaires were returned from 99 graduate students as well as 58 graduate faculty members. From data analysis, Manuel formulated three general conclusions. First, the respondents were generally active in their professional fields in such areas as public speaking, professional organizations, and service on committees, but it was not true of their writing for publication. Second, that although one-half of the respondents said that they would complete the degree, considering the number of years that had elapsed since they were admitted, and the fact that the majority had made little progress toward completing the dissertation, it seemed unlikely any great number will complete the doctorate. And, last of all, the doctoral student non-completers ascribe the main reason for their failures to factors beyond their control, whereas doctoral committee chairmen tended to think the main reasons were factors over which candidates should have exercised better control.

Renetzky (1966) and Wetherill (1960) both studied all-but-dissertation (ABD) status graduate students in graduate education programs. All-but-dissertation status for the

purposes of those studies was defined as those graduate students who, upon completing all requirements for the doctoral degree, except the dissertation, do not complete the research project and get the degree. Renetzky found:

1) that ABD's exhibit significantly less ability to crystallize a dissertation topic early in their graduate school careers, 2) family encouragement is significantly less with ABD's, 3) ABD's receive significantly less employer encouragement toward doctoral study, 4) ABD's have significantly less ability to achieve a workable, cooperative relationship with other members of the university network (e.g., faculty, doctoral advisors, and dissertation committee members), 5) ABD's have a significantly higher incidence of divorce, 6) the economic prosperity of ABD's is significantly less than completers, and 7) there is significantly less stability regarding the image of the doctorate among ABD's.

Wetherill, in contrast, found that the interaction of a variety of factors caused his subjects (62 completers and non-completers) to discontinue their doctoral studies. The most important reasons were responsibilities having to do with their positions in the field and the financial responsibilities they assumed. No outstanding differences were found between students who were completers and non-completers on such factors as influences motivating graduate work, general scholastic average, and financial support received

during the years of graduate work. Wetherill also noted that of those who were completers of the doctorate, a large percentage had written a masters thesis.

Santos (1966) studied graduate students in the areas of farm management, rural sociology, and rural education to determine what constitutes success in graduate candidacy based on the opinion of a panel of professors. According to the panel of professors, the criteria for determining success in graduate candidacy, with their relative weights of importance were: ability to think critically and analytically, 10; knowledgeability, 3.6; ability to do research, 3.3; creativity, 3.3; ability for self-direction, 2.8; degree of motivation, 2.4; performance in course work, 1.8, and skill in communication, 0.7. It is possible, however, that due to the areas of study that the graduate students majored in, limited generalizability could be likely.

Summary

The review of the literature was divided into two broad sections: 1) doctoral programs in adult and continuing education, and 2) doctoral student completers and non-completers in adult and continuing education and the broader field of education as a whole.

As noted in the first section, doctoral programs in Adult and Continuing Education (ACE) have had a fairly long history in the United States beginning at Columbia University in 1935. As of 1980, there were at least a total of 2,239 doctorates in adult and continuing education.

Although there has been a steady increase in graduates since the inception of doctoral programs, the most profound growth has been seen in the past two decades.

The student population in doctoral programs in ACE is also apparently changing. Houle and Buskey (1966) found that of a total of 556 doctoral recipients, 400 (83.3%) were male, and that the mean age in 1965 was 46.7. In contrast to this, Ross (1978) and Meisner, Parsons and Ross, (1979) using samples of 291 respondents, discovered that 51.9% were female and that the largest ranges of students were between 29 and 34 years old with the 35 to 43 age range being the second largest group. Clearly, the trend in doctoral programs in ACE has gone from older students who are male to younger students who are female. Ross further suggests looking at adult life stages to ascertain their impact on graduate study in ACE programs.

The second section of the review of the literature focused on specific studies having to do with doctoral student completers and non-completers both in ACE and education in general. There appears to have been only one study specifically in ACE that addresses doctoral student completers and non-completers (Pristo). Unfortunately, the data analysis in this study using factor analysis and the canonical correlation rendered the results ineffective. However, significant results were seen in the prediction of doctoral success on two variables: 1) time since bachelors degree, and 2) final graduate GPA.

The majority of the studies discussed in the review of the literature were on prediction of success of doctoral students in schools, departments, or colleges of education. Findings were mixed, for the most part, but offered many recommendations for further research. Variables used to determine prediction of success also varied widely in the studies. The following list includes some of the variables used to predict success, as well as the specific researcher who used them. Also included in this list will be many areas that this writer intends to address in the present study.

Table 2:2 Researcher and Variables Used to Predict
Success of Doctoral Students in Education
(In order of presentation in chapter)

Researcher	Variables
Pristo (1977)	Graduate Record Examinations (GRE's), Millers Analogy Test (MAT), years since receipt of last BA and MA degree, any graduate degree not within degree program, GPA in MA program, holding of a MA degree, type of college the BA and MA degree received in, total number of graduate hours upon entrance to program, rating of undergraduate and graduate conferring degree, sex, age upon acceptance to program, total number of colleges and universities attended, undergraduate GPA, junior and senior GPA, GPA in undergraduate major, number of other doctoral programs accepted into.
Bundy (1968)	Age, GPA in MA program, location of BA and MA institutions, type of BA and MA institutions, areas of study in BA and MA programs, type of educational experience, sex.
Gleason (1963)	Ability to isolate, define and research problem, physical health, effective study habits, GPA.
Johnston (1961)	Undergraduate GPA, graduate GPA, score on Boston University General Association Test, recommendation letters, sex, full-time versus part-time enrollment, work experience in education, marital status, staff members of school of education, number of advisors.
Kerr (1966)	GPA in BA and MA program, MAT, Ohio State Psychological Examination, receipt of fellowship, assistantship or scholarship.

Table 2:2 (con'd.) Researcher and Variables Used to Predict Success of Doctoral Students in Education

Researcher	Variables
Colvin (1968)	GRE's, undergraduate GPA, education GPA, non-education GPA.
Thom and Hickcox (1975)	Previous academic success, MAT, letters of recommendation, academic, career and administrative success, transcripts, resume.
Manuel (1966)	Public speaking, professional organizations, service on committees, writing for publication, time elapsed since degree completion, control of degree progression.
Renetzky (1966)	Ability to crystallize dissertation topic, family and employer encouragement, ability to achieve workable, cooperative relationship with members of university network, marital status, economic prosperity, image of doctorate.
Wetherill (1960)	Positions in the field, financial responsibility, influence motivating graduate work, general scholastic average, financial support, writing masters thesis.
Santos (1966)	Ability to think critically and analytically, knowledgeability, ability to do research, creativity, ability for self-direction, degree of motivation, performance in course work, skill in communication.

It is the goal of this writer to incorporate much of the above into a usable instrument to assess doctoral

students in Adult and Continuing Education at Michigan State University. It is hoped that this study will add to the research studies already in use, as well as lay a solid foundation for further doctoral study in adult and continuing education.

CHAPTER III

RESEARCH DESIGN AND PROCEDURES

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RESEARCH DESIGN AND PROCEDURES

A description of the research questions, population surveyed, the instrument used in data collecting, and procedures followed in collecting and analyzing the data are included in this chapter.

Research Questions

As an essentially descriptive study, the research examined the following questions:

A. What are some of the similarities and differences in selected characteristics of graduate students who are completers and non-completers of the doctorate in Adult and Continuing Education (ACE)?

B. Are there any particular characteristics that are significantly related to whether a student is a completer or non-completer of the doctorate?

C. After examining some of the characteristics of graduate students in ACE who are completers and non-completers, what recommendations can be made to future doctoral students in this situation regarding: 1. the probability of their own particular characteristics affecting degree

completion; 2. ways to overcome obstacles and promote the probability of completing the degree; and 3. characteristics that are typical of other ACE graduate students at MSU and how they progressed in their studies.

D. What can academic advisors and professors of doctoral candidates do to increase the probabilities of their advisees completing their degree programs?

The Population

The population for the study was composed of all doctoral students who were completers and non-completers in Adult and Continuing Education (ACE) at Michigan State University (MSU) during the years 1970 to 1980. To qualify as a subject in the study, it was necessary to have a record of each graduate student's name and address in order for that subject to respond to the survey instrument. A total population of 147 graduate students were identified by MSU's ACE academic advisors, MSU's Alumni and Donor Records Office, and the Office of Graduate Student Affairs as meeting the criteria for inclusion in the study. Because the population of the study was small, the entire population was used.

Procedure for Obtaining Data

Pre-test

In order to obtain data on the similarities and differences between selected characteristics of doctoral students in ACE, a questionnaire was developed in June, 1981. The survey instrument was refined in a pre-test administered to three doctoral students (2 male and 1 female) in ACE, at the University of California, Berkeley Campus. Responses and suggestions on the pre-test resulted in a clarification and reorganization of the content of the questionnaire. It was also determined that completion of the survey instrument would take approximately 10 to 15 minutes.

Permission to Use Human Subjects

A request to conduct the research project using MSU students as subjects was approved October 5, 1981 by the University Committee for Research Involving Human Subjects.

Questionnaire Development

Most of the questions in the survey instrument were selected on the basis of a review of the literature. Dominant questions, concerns, and recommendations were generated from various researchers and were duplicated in the survey instrument. In addition, there were five demographic questions on the survey relating to sex, marital status, age, race, and nationality.

After meeting with the doctoral guidance committee, an additional area of inquiry was established for inclusion in the survey instrument: the impact of specific life events on the continuation or non-continuation of the doctoral program. To adequately address this question, selected items were used from the Holmes and Rahe Social Readjustment Rating Scale, also known as the Life Change Check List (Holmes and Rahe, 1967). Although only one question on the survey specifically addressed this area, there were 20 possible sections or responses to the question.

The Survey Instrument

It its final form the survey instrument contained 30 questions, some of which included multiple responses. Many of the questions provided space for respondents to make personal responses other than the responses listed to the question. The survey instrument was mailed to subjects in mid-October, 1981.

Measures

There were two measures used in the study that required further comment in relation to reliability. The measures requiring further discussion were the self-reported grade point averages (GPA's) and the Social Readjustment Rating Scale (SRRS).

Self-reported GPA

There were five questions used on the survey instrument that asked subjects to report their GPA's during some facet of graduate and undergraduate college preparation. Past research studies on self-reported GPA's indicate that this is a highly reliable measure.

Baird (1976), in a comprehensive review of the literature on self-reported GPA's reported:

students' reports of their grades are about as usable as school-reported grades. This conclusion seems particularly valid when one considers the conditions involved in some of the studies. That is, even when students were faced with the pressure of maintaining scholarships, applying to college and deliberate experimental attempts to get them to change their response, they continued to tell the truth (Baird, 1976).

Benton (1980) in a recent study determined whether university students would accurately report their GPA's. A total of 525 university students were asked to fill out data sheets including questions on self-reported GPA's. It was found that 2.5% of the students said they could not remember or did not know their GPA. Of the total number of students, 62 self-reported GPA's were compared with official records. A Pearson Product Moment Correlation showed that self-reported GPA's and official GPA's correlated .94. The results indicated no significant differences between means or variances of self-reported and official GPA's. Benton concluded that students can and do accurately report their GPA's to researchers.

In addition, research by Davidsen (1963), and Nichols and Holland (1963), also indicate self-reported GPA's are reliable. Davidsen yielded a correlation of .92 between student-reported and school-reported grades. However, it could be a presumable weakness that he used a population of high school students rather than college students. Nichols and Holland gathered information on a questionnaire and found that self-reported grades were accurate indicators of actual grades.

The Social Readjustment Rating Scale --
Life Change Check List

Although Holmes and Rahe (1967) developed the Social Readjustment Rating Scale (SRRS), the historical origins of the instrument can be traced to earlier researchers. Lief (1948) credits Adolph Meyer, a psycho-biologist, as the inventor of the "life chart," a device for organizing medical data as a dynamic biography. It provided a unique method for demonstrating his schema of the relationship of biological, psychological, and sociological phenomena to the processes of health and disease in man. The importance of many of the life events used in this research was emphasized by Meyer:

changes of habitat, of school entrance, graduations or changes or failures; the various jobs, the dates of possibly important births and deaths in the family, and other fundamentally important environmental influences (Meyer in Lief, 1948).

In more recent years, Harold G. Wolff incorporated the concepts of Pavlov, Freud, Cannon, and Skinner into the

Meyerian schema. As a result of synthesizing the findings of several studies (Wolff et al. 1950, Holmes et al. 1950, Wolf 1965, Wolf et al. 1955, Grace et al. 1951) it was found that there was powerful evidence that stressful life events, by evoking psychophysiologic reactions, played an important causative role in the natural history of many diseases (Holmes and Rahe, 1967).

Beginning in 1949, the SRRS was developed and modified on a population of over 5,000 patients to empirically ascertain the quality and quantity of life event clusters at the time of disease onset. The life events used were those that pertain to major areas of dynamic significance in the social structure of the American way of life. Included in these life events were family constellation, marriage, occupation, economics, residence, group and peer relationship, education, religion, recreation, and health. Throughout the course of Holmes and Rahe's research there was one common theme to all life events; that the occurrence of each life event usually evoked in the individual some adaptive or coping behavior. Thus, there was developed a group of life events that evoked a significant change in the ongoing life pattern of the individual (Holmes and Rahe 1967).

Brandenburg (1978) and West (1978) studied whether the SRRS was a reliable instrument with Mexican-American and Afro-American subjects, respectively. West explains that when Holmes and Rahe divided their sample of men and women

of varying ages, religions, marital status, and ethnic origins into discrete groups, in order to obtain Pearson coefficients between the groups, it was found that all correlations were 0.90 and above with the exception of comparisons between White and Afro-American groups, which was 0.82. Together, West and Brandenburg devised a life events scale known as the Brandenburg-West 22 Life Events. This scale was to be used in conjunction with the SRRS to yield more reliable correlation coefficients. West, using the Afro-American population, found that the SRRS and the Brandenburg-West 22 together were not better predictive devices of injury and illness than the SRRS alone. Brandenburg, using the Mexican-American population, found the SRRS and the Brandenburg-West 22 in combination proved to be highly reliable across time.

The conclusions of numerous researchers studying the SRRS have resulted in mixed, but generally favorable reactions. Holmes and Holmes (1970) reported that the SRRS scores have been shown to have a significant relationship to symptoms of physical stress. They found that the number of life change events that an individual scores on the SRRS were related to signs and symptoms of everyday life. Rubin, Gunderson, and Arthur (1971) administered the SRRS to a group of navy shipmen on a 7 month cruise. The findings showed that while subjects with high scores tended to have a greater number of illnesses, the differences were not significant when compared to subjects with low scores.

In a study adapting the SRRS to college students, Batlis, et al. (1972) found that a modified form of the SRRS indicated significant differences between college students who had been hospitalized in the previous six months and those who had not. Although Bieliauskas et al. (1974) found that predicting college students' needs for future professional help, using the SRRS, showed poor predictive validity.

Bieliauskas and Strugar (1976) suggest that while the predictive validity of the SRRS may be weak, recent results generally suggest that the power of the SRRS to discriminate aid-seeking from non-aid-seeking in college students decreases as the size of the sample being tested decreases.

Finally, Gerst et al. (1978) report that one of the weaknesses of the SRRS is the stability of scores over time. In their study, two questions were addressed: 1) what is the long-term stability of the SRRS self-reports over a two year period, and 2) what is the stability of such reports between psychiatric patients as compared to non-patients over a similar period of time. It was found that, in general, subjects who do not have psychiatric problems show good temporal stability in the ranking and magnitude estimations of the stressfulness of specific life events. It was found to be less stable with psychiatric patients, however, perhaps because they feel more distressed while taking the SRRS.

In general, Gerst et al. found there was considerable score stability for "normal" individuals over time.

As a result of a review of the literature on the Social Readjustment Rating Scale (Life Change Check List) and in keeping with other researchers, it was felt only certain life change events were relevant to this study. There were many other life events that were possible, however, and all events were not included in the questionnaire instrument used in this study.

Collection of Data

Subjects for this study were contacted through the United States mail in mid-October, 1981. Included in each subject's packet of materials were a cover letter explaining the research project, consent form, questionnaire, self-addressed stamped envelope, and self-addressed postcard, indicating whether the respondent would like a copy of the results. A total of 147 doctoral students were sent the questionnaire. Copies of the approval letter from the University Committee for Research Involving Human Subjects, the cover letter, follow-up letter, postcard, consent form, and the questionnaire are included in the Appendix of the study. A follow-up questionnaire was mailed to non-respondents three weeks following the original letter.

Procedures for Analysis

The Survey Results

Of the total 147 questionnaires that were mailed to subjects, 90 were returned. The return rate is summarized in Table 3:1.

Table 3:1 Questionnaire Response of Graduate Students in ACE from 1970 to 1980.

Questionnaires Distributed	Questionnaires Returned	C's	NC's	Others*
147	90(61%)	48	35	7

*Others consisted of two individuals not in the program, and five in the Education Specialist Program.

Of the subjects that responded to the study, two graduate students indicated they were not in the doctoral program in Adult and Continuing Education (ACE) and five responded that they were in or had graduated from the Education Specialist (Ed. Sp.) program in ACE at Michigan State University. The seven non-responses were not used in the data and were defined out of the sample. In addition, it was found that 48 students were completers (C's) of the doctoral program in ACE and 35 were non-completers (NC's). Therefore, there were 83 completers and non-completers used in the study.

Non-Respondents

There were 57 subjects who did not respond to the questionnaire. Of the non-respondents it was not possible to accurately determine whether students were completers or non-completers.

Analysis of Data

Examination of the completed questionnaire indicated that all of the questions could be used for purposes of analysis. Data were entered in card format using a Cathode ray tube. The data were analyzed using the Statistical Package for the Social Sciences. Once the information had been filed on the computer, the Pearson Product Moment Correlation, regression analyses and Chi Square were the statistical tools used in analysis of data.

For the purposes of this study, significance was established at $p \leq .05$. Marginally significant results were also defined and included as $.051 \leq p \leq .10$ because this study is exploratory in nature and the author does not wish to ignore even marginally significant information that might be found to be significant by other researchers.

Summary

Beginning with a description of the research questions to be explored in the study, Chapter III continued with a description of how the study would ensue. The objective of the study was to ascertain similarities and differences of

doctoral student completers and non-completers in ACE at MSU from the years 1970 to 1980.

Chapter III continued with a description of the population to be studied and a summary of the procedures to be used in obtaining the data in the study. The pre-test was discussed as well as how the questionnaire was developed. The next section of Chapter III included a discussion of the reliability of the two measures used in the study. The measures were the self-reported GPA's and the Social Readjustment Rating Scale (Life Change Check List).

The procedure for the collection of data was described and finally, Chapter III concluded with a presentation of information regarding the survey results, a description of the non-respondents, and a description of the methods used in analyzing the data.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Having described the research design and procedures in Chapter III, the following chapter includes the analysis of data generated by the survey instrument. The questionnaire responses are presented under two broad headings:

- 1) A description of respondents, and
- 2) Selected characteristics of completers (C's) versus non-completers (NC's).

Throughout Chapter IV, each subheading will include a description of respondents (by C vs. NC and sex) as well as any correlational or comparative findings. There were several former studies that examined sex differences of graduate student completers and non-completers. Since sex differences appeared to yield many significant relationships, it will be examined in this study.

A Description of Respondents

The total population (potential respondents) was 147 with the respondents in this questionnaire (N=82) described according to several demographic variables: sex, marital status, nationality and race.

The demographic variables take into account whether the respondent was a doctoral program completer (C) or non-completer (NC) including the respondents sex.

Sex

Of the total group of respondents, N=82, approximately 60% were male and 40% female. Table 4:1 shows the frequency of male and female respondents as well as their status as C's and NC's in the doctoral program in Adult and Continuing Education (ACE) at Michigan State University (MSU).

Table 4:1 Sex of Respondents and Status in Doctoral Pursuits (Column Percentages in Parentheses)

	Total N	Completer N	Non-Completer N
Male	49 (59.8)	30 (63.8)	19 (54.3)
Female	33 (40.2)	17 (36.2)	16 (45.7)
Total	82 (100)	47 (100)	35 (100)

Of the total group of male students (N=49), 61.2% were C's and 38.8% were NC's. However, with the female students (N=33), 51.5% were C's and 48.5% were NC's. Chi Square analysis indicates there was no significant difference between males and females in their frequency of completing or non-completing the doctoral program

($\chi^2=.41$ (d.f.=1) $p=.52$). Although, proportionately, there were more males who completed the program than females.

Marital Status

Table 4:2 shows the frequencies for respondents in the area of marital status including the categories of single, married or other.

Table 4:2 Frequency of Respondents by Marital Status

	Total N	% of Total
Single	18	22.2
Married	60	73.2
Other	3	3.7
Total	81	99.1

Table 4:2 clearly shows that there are far more married doctoral students than either single or in the "other" category. Table 4:3 presents the breakdown of C's vs. NC's and sex by marital status.

Table 4:3 Marital Status by C vs. NC and Sex (Column Percentages in Parentheses)

	C's	NC's	Males	Females
Single	9 (19.1)	9 (25.7)	5 (10.2)	13 (39.4)
Married	38 (80.9)	22 (62.9)	44 (89.8)	16 (48.5)
Other	--	3 (8.6)	--	3 (9.1)
Total	47 (100)	34 (97.2)	49 (100)	32 (97.0)

Chi Square analysis between C's vs. NC's and marital status was marginally significant ($\chi^2=5.32(d.f.=2)p=.07$) indicating that there might be some relationship between marital status and whether a student completes the doctoral degree in ACE. Married students tended to complete the degree more frequently than did single students. It is interesting to note that of the three respondents who answered "other" for the marital status item, all were female and all NC's.

Chi Square analysis with marital status and sex showed that males (89.8%) were more likely to be married than were females (48.5%). Conversely, females were more likely to be single than were males ($\chi^2=16.79(d.f.=2)p=.0002$).

At this point the possibility was examined that being married might help a male student complete his degree but hinder a female student. Hierarchical regression analysis was used to examine whether the interaction between sex and marital status added to sex and marital status by themselves when explaining C vs. NC (see Table 4:4). The amount of explanatory power added by the interaction was not significant ($F(1,75) = .27, p = \text{not significant}$).

Table 4:4 Possible Differential Impact of Marital Status
(Regression Equation: C vs. NC = Marital
Status + Sex + Interaction)

	R^2	R^2 Change
Marital Status	.026	.026
Sex	.027	.001
Interaction	.028	.001

This analysis shows that being married does not necessarily help males more than females while being single does not necessarily help females more than males.

Nationality

Table 4:5 shows the nationalities of students in the doctoral program in Adult and Continuing Education (ACE). Students were asked whether they were United States Citizens or of International descent.

Table 4:5 Nationality of Respondents by C vs. NC and Sex (Column Percentages in Parentheses)

	Total N	C's	NC's	Males	Females
U. S. Citizen	71 (86.6)	42 (89.4)	29 (82.9)	43 (87.8)	28 (84.8)
International	9 (11.0)	5 (10.6)	4 (11.4)	6 (12.2)	3 (9.1)
Other	2 (2.4)	--	2 (5.7)	--	2 (6.1)
Total	82 (100)	47 (100)	35 (100)	49 (100)	33 (100)

U.S. Citizens made up the majority of the respondents with 86.6% compared to the International students who consisted of 11% of the total. In the U.S. Citizen category, nearly the same percentage of respondents were completers (89.4%) as were non-completers (82.9%). In addition, the percentages of U.S. Citizens that were males (87.8%) and females (84.8%) were nearly the same, though their N's varied. The respondents who were of International descent were nearly evenly distributed between C's (10.6%) and NC's (11.4%). Although there were twice as many male (N=6) as female (N=3) International respondents, their relative percentages were less contrasting with 12.2% and 9.1%, respectively. Finally, of the two respondents who answered they were "other" than a U.S. Citizen or International, both respondents were female NC's (non-completers).

Race

In the area of race, nearly all respondents answered that they were either Asian, Black, White or Hispanic.

Table 4:6 gives the frequencies of respondents including whether they were C's vs. NC's and their sex.

Table 4:6 Race of Respondents by C vs. NC and Sex (Column Percentages in Parentheses)

	Total	C's	NC's	Males	Females
Asian	4 (4.9)	1 (2.1)	3 (8.6)	3 (6.1)	1 (3.0)
Black	8 (9.8)	5 (10.6)	3 (8.6)	4 (8.2)	4 (12.1)
White	66 (80.5)	41 (87.2)	25 (71.4)	41 (83.7)	25 (75.8)
Hispanic	1 (1.2)	0	1 (2.9)	1 (2.0)	0
Other	2 (2.4)	0	2 (5.7)	0	2 (6.1)
Total	81 (98.8)	47 (99.9)	34 (97.2)	49 (100)	32 (97.0)

As Table 4:6 illustrates, 80.5% of the respondents were White, nearly 10% were Black, nearly 5% were Asian and just over 1% were Hispanic. Whites comprised 87.2% of the completers (C's) and 71.4% of the non-completers (NC's). In addition, 83.7% of the male respondents and 75.8% of the female respondents were White.

There were too few minority respondents for meaningful analyses to be performed when all categories of race were included. All minorities were grouped together, therefore, and compared to Whites. A greater percentage of Whites completed their degrees than did minorities (62.1% vs. 40.0%). This difference, however, was not significant ($\chi^2=.11(d.f.=1)p=.20$).

Also, a higher percentage of White respondents than minority respondents were males (62.1% vs. 53.3%). This difference also was not significant ($\chi^2=.11(d.f.=1)p=.74$).

Characteristics of Completers and Non-Completers

What follows is a summary of the results of the findings included for each of the selected characteristics used in the study. Again, the sex variable will be examined in each area.

Age

The ages of doctoral student respondents at admission to the program yielded significant, although not particularly surprising, findings. Table 4:7 summarizes the findings of the overall group of doctoral student respondents:

Table 4:7 Age at Admission of Doctoral Student Respondents

Age	Total N	Total %	Cumulative %
27-30	5	6	6
31-35	14	17	24
36-40	20	24	50
41-45	10	11	61
46-50	14	17	79
51-55	9	11	90
56-60	7	8	99
61-65	1	1	100
Total	80	95	100

As the above illustrates, 90% of the respondents were 55 years old or below when they were admitted to Michigan State University (MSU). The largest number of students, N=44 (52%), were spread between the ages of 36 and 50 with 20 (24%) students in the age group of 36 to 40. Nearly the same percentage of students were clustered between the ages of 27 and 35 (23%) as were from 51 to 65 (20%). It was interesting to note that there were an equal number of respondents who were from ages 41 to 44 (11%) as were from 51 to 55 (11%). It appears that most students in ACE were

between the ages of 36 and 50 (52%) when admitted to MSU. Of the remaining respondents, 23% were between the ages of 51 and 65. Almost 80% of the total group was 50 and below.

The age of subjects was examined by Completers (C's) vs. Non-Completers (NC's) and by sex. Table 4:8 summarizes the age means, medians, and ranges of male and female doctoral C's and NC's.

Table 4:8 Age Means, Medians and Ranges of Doctoral Student Respondents by Sex and Degree Status

	Total	C's	NC's	Males	Females
Age Means	42.6	45.5	38.7	43.4	41.3
Age Medians	41.0	45.5	37.5	42.2	38.3
Age Ranges	27-65	31-60	27-65	27-58	29-65

Age was significantly correlated (Pearson) with C vs. NC though not with sex. The correlation of C vs. NC with age was $r^2 = -.14, p = .00$. This result indicates that older students were more likely to have completed their doctoral studies in ACE than younger students. Then, examining sex with age, yielded the correlation $r^2 = -.01, p = .16$. This finding indicated that there were no significant differences between the ages of female and male respondents.

Age Began and Completed BA

The mean ages at which doctoral student respondents began and completed their BA degrees was examined and reported by C vs. NC and by sex in Table 4:9.

Table 4:9 Mean Age of Respondents Beginning and Completing BA by C vs. NC and Sex.

	Total	C's	NC's	Males	Females
BA Begin	19.1	19.3	18.7	18.9	19.3
BA Complete	23.7	23.4	24.1	23.2	24.6

Using a Pearson correlation, findings indicate that there were no significant differences between the age beginning and completing the BA for either C vs. NC or sex. Following, in Table 4:10, is a summary of this:

Table 4:10 Pearson Correlations of Age Beginning and Completing the BA to C vs. NC and Sex.

	Begin BA	Complete BA
C's vs. NC's	$r^2 = -.005, p = .26$	$r^2 = .004, p = .28$
Sex	$r^2 = -.002, p = .36$	$r^2 = .02, p = .11$

In addition, it was found that there were no significant differences between the number of years it took to complete the BA and C vs. NC ($r^2=.02, p=.11$). In examining the number of years it took to complete the BA compared with sex ($r^2=.01, p=.14$), there also were no significant differences.

Age Began and Completed MA

The mean ages at which doctoral student respondents began and completed their MA degrees is examined in Table 4:11. Mean ages of respondents beginning and completing the MA degree were compared to the total group of respondents, including those that were C's vs. NC's and sex.

Table 4:11 Mean Age of Respondents Beginning and Completing the MA by C vs. NC and Sex.

	Total	C's	NC's	Males	Females
MA Begin	27.2	27.3	27.1	25.8	29.3
MA Complete	29.3	29.3	29.3	28.0	31.3

In correlating beginning and completing the MA by C vs. NC in the ACE doctoral program, findings were not significant. However, in correlating MA beginning and completing by sex, significant differences were found. Table 4:12 summarizes these correlations.

Table 4:12 Pearson Correlations of Age Beginning and Completing the MA to C vs. NC and Sex.

	MA Begin	MA Complete
C's vs. NC's	$r^2 = -.0004, p = .44$	$r^2 = -.00004, p = .48$
Sex	$r^2 = .06, p = .01$	$r^2 = .05, p = .02$

Female respondents were significantly older than their male counterparts when they began and completed their MA degrees. In addition, males and females did not differ significantly in their rates of having received an MA ($r^2 = -.0009, p = .39$).

There were no significant differences in the number of years it took to get the MA and C vs NC ($r^2 = .003, p = .32$). However, there was a marginally significant relationship between the number of years it took to get the MA and sex ($r^2 = -.03, p = .07$). This finding indicates that it may take females longer to complete the MA than it takes males.

Age Began and Interrupted Ph.D.

When looking at the results of this selected characteristic caution must be taken. The phrasing of the questionnaire item using the word "interrupted" appeared to have confused many respondents. It was not uncommon for respondents to not answer the question at all or to

cross-out the word on the questionnaire and replace it with another word (e.g. completed). Answers that were entered appeared to typically represent ages beginning and completing the Ph.D.

Table 4:13 summarizes the mean age of respondents beginning and interrupting the Ph.D. by completers (C's) vs. non-completers (NC's) and sex.

Table 4:13 Mean Age of Respondents Beginning and Interrupting Ph.D. by C vs. NC and Sex.

	Total	C's	NC's	Males	Females
Ph.D. Begin	35.2	35.0	35.5	34.8	35.8
Ph.D. Interrupt	40.0	39.8	38.6	40.3	38.6

Note: For completers age reported is completion age, for non-completers age reported is age at interruption.

When correlating age at beginning of the Ph.D. with C vs. NC ($r^2=.001$, $p=.37$) and with sex ($r^2=.004$, $p=.28$), findings were not significant.

When respondents were asked to indicate whether they planned to complete the degree, 27 out of 32 non-completers replied. Of that total, 24 (90%) responded that they did intend to complete, two indicated they did not know, and only one respondent replied she would not finish the Ph.D.

It was also found that students who began their Ph.D. programs a greater number of years ago were older than were students who began their Ph.D.'s in more recent years ($r^2=.10, p=.002$). This indicates a significant shift from the beginning of the decade to the end. New students were older in the early 1970's than in the late 1970's.

Time Lapse Between BA to MA and MA to Ph.D.

Time lapse between BA to MA and MA to Ph.D. refers to the number of years that elapsed from the time the respondent completed the BA (or MA) until the time of entering the MA (or Ph.D.) program.

The following two tables contain summaries of respondents' mean years for time lapse between the BA to MA (Table 4:14) and MA to Ph.D. (Table 4:15).

Table 4:14 Mean Years of Time Lapse Between BA to MA

	Total	C's	NC's	Males	Females
Time Lapse from BA to MA	3.5	4.6	2.4	2.9	4.9

Table 4:15 Mean Years of Time Lapse Between MA and Ph.D.

	Total	C's	NC's	Males	Females
Time Lapse from MA to Ph.D.	5.4	5.3	5.8	6.3	4.3

Pearson analysis of time lapse from BA to MA of C's vs. NC's with number of years that have elapsed between the BA to MA (see Table 4:14) yielded the following relationship: $r^2 = -.03, p = .05$. This finding was significant and indicates that NC's may be more likely to have a shorter number of years that have elapsed from the BA to MA than do C's. In addition, looking at the correlation between sex and time lapse from the BA to MA, there was another marginally significant relationship: $r^2 = .03, p = .06$. Males were more likely to begin MA programs in a shorter number of years after receiving the BA than were females.

Table 4:15 shows that the results were different for MA to Ph.D. compared with BA to MA time lapse. The Pearson correlation of time lapse for MA to Ph.D. and C's vs. NC's was not significant ($r^2 = .002, p = .35$). There was no relationship between C's vs. NC's and the number of years that elapsed after the MA completion and before beginning the

Ph.D. However, there was a marginally significant relationship between sex and time lapse from MA to Ph.D. ($r^2 = -.03, p = .06$). This correlation shows that males were out of school longer after MA completion than were females.

In general, then, females in this study appeared to stay out of graduate school initially after BA completion for a longer period of time than did males. Females tended to stay out of school thereafter for a shorter time period than did males. Males in contrast, took a shorter period of time to begin graduate school after BA completion but seem to have longer time lapses between MA and Ph.D. studies than do females.

Field of Study for BA and MA

The BA and MA areas of study consisted of the respondent indicating whether his or her BA and MA degrees were in either education or non-education curricula. Tables 4:16 and 4:17 show the number of respondents in each of the categories used with their respective percentages in parentheses.

Table 4:16 Respondents in Education or Non-Education
Curricula for BA Degree (Column Percentages
in Parentheses)

	Total	C's	NC's	Males	Females
Education	32 (39)	16 (34)	16 (46)	19 (39)	13 (39)
Non-Education	49 (60)	31 (66)	18 (51)	30 (61)	19 (57)

Table 4:17 Respondents in Education or Non-Education
Curricula for MA Degree (Column Percentages
in Parentheses)

	Total	C's	NC's	Males	Females
Education	54 (66)	33 (70)	21 (60)	33 (67)	21 (64)
Non-Education	27 (33)	14 (30)	13 (37)	16 (33)	11 (33)

Results of Chi Square analyses show there is no significant relationship between Education or non-Education majors for completers (C's) vs. non-completers (NC's) or sex. Following, in Table 4:18, is a summary of the above.

Table 4:18 Chi Square Analyses of BA and MA Curricula
by Doctoral Degree Status and Sex.

	C or NC	Sex
BA Education or Non-Education	$\chi^2=.91(d.f.=1)p=.34$	$\chi^2=.0(d.f.=1)p=1.0$
MA Education or Non-Education	$\chi^2=.31(d.f.=1)p=.58$	$\chi^2=.0(d.f.=1)p=1.0$

GPA for BA, MA and Doctoral Program

The respondents for this selected characteristic were asked to furnish self-reported GPA's for BA, MA and Ph.D. programs. As previously noted, other researchers reported that the reliabilities of such reporting were high. Some caution, however, would be in order when interpreting these results.

The mean GPA's and ranges of GPA's are reported for BA, MA and Ph.D. coursework in the following Table 4:19.

Table 4:19 Self-Reported Mean GPA's and Ranges for Respondent BA's, MA's and Ph.D.'s (GPA Ranges Shown in Parentheses)

	BA	MA	Ph.D.
Total	3.01 (2.01-4.00)	3.64 (3.00-4.00)	3.71 (3.00-4.00)
C's	2.89 (2.01-4.00)	3.67 (3.00-4.00)	3.67 (3.00-4.00)
NC's	3.20 (2.40-3.96)	3.65 (3.00-4.00)	3.77 (3.27-4.00)
Males	2.86 (2.01-3.96)	3.59 (3.00-3.97)	3.69 (3.20-4.00)
Females	3.25 (2.30-4.00)	3.71 (3.00-4.00)	3.75 (3.00-4.00)

Pearson correlations indicate that some of these relationships were significant. Table 4:20 reports these findings.

Table 4:20 Pearson Correlations Between BA, MA and Ph.D. GPA's and C vs. NC Status and Sex.

	C vs. NC	Sex
BA	$r^2 = .07, p = .01$	$r^2 = .11, p = .002$
MA	$r^2 = .001, p = .39$	$r^2 = .05, p = .02$
Ph.D.	$r^2 = .05, p = .03$	$r^2 = .02, p = .10$

These correlations show that NC's (non-completers) had significantly higher BA and Ph.D. GPA's than did C's (completers). Also, females had higher BA and MA GPA's than did males.

GPA in Education and Non-Education Courses

The self-reported GPA's for this selected characteristic were for education and non-education courses specifically at the Ph.D. level. Again, since the GPA's were self-reported, reliability and/or validity could have been a problem. The mean GPA's and ranges for education and non-education courses are reported in Table 4:21.

Table 4:21 Self-Reported Mean GPA's and Ranges for Education and Non-Education Courses (GPA Ranges Shown in Parentheses)

	Education Courses	Non-Education Courses
Total	3.82 (3.25-4.00)	3.65 (3.00-4.00)
C's	3.80 (3.25-4.00)	3.61 (3.00-4.00)
NC's	3.85 (3.50-4.00)	3.71 (3.20-4.00)
Males	3.78 (3.25-4.00)	3.65 (3.00-4.00)
Females	3.88 (3.50-4.00)	3.66 (3.30-4.00)

As Table 4:22 illustrates, there is a marginally significant relationship between C vs. NC and GPA in non-education courses. Non-completers had higher GPA's. In addition, females had higher GPA's than did males for education courses. This was not true for non-education courses.

Table 4:22 Pearson Correlations Between GPA's in Education and Non-Education Courses in Doctoral Program.

	C vs. NC	Sex
Education Courses	$r^2=.02, p=.14$	$r^2=.06, p=.02$
Non-Education Courses	$r^2=.03, p=.07$	$r^2=.00003, p=.48$

It is interesting to note, as Table 4:21 illustrates, that respondents reported non-education GPA's to be consistently lower than education GPA's.

Years Worked in Education and Adult Education

The number of years respondents worked in education and adult education was examined to see if there were any relationships between these selected characteristics and Completers (C's) vs. Non-Completers (NC's) and sex. Table 4:23 presents respondents' mean years worked in these two areas including the ranges of years worked.

Table 4:23 Mean Years Respondents Worked in Education and Adult Education (Ranges in Parentheses)

	Years Worked in Education	Years Worked in Adult Education
Total	13.0 (0-36)	8.9 (0-31)
C's	16.0 (0-36)	11.4 (0-31)
NC's	8.9 (0-22)	5.7 (0-17)
Males	14.6 (0-32)	11.1 (0-31)
Females	10.7 (0-36)	5.7 (0-18)

Analyses of the above using the Pearson correlation yielded significant findings on all measures. Table 4:24 summarizes these analyses.

Table 4:24 Pearson Correlations of Years Worked in Education and Adult Education with C vs. NC and Sex.

	C vs. NC	Sex
Years Worked in Education	$r^2 = -.17, p = 0.00$	$r^2 = -.05, p = .05$
Years Worked in Adult Education	$r^2 = -.12, p = .001$	$r^2 = -.10, p = .002$

There was a significant relationship between the number of years worked in education and adult education and completing the doctoral degree. It seems apparent that the more years a respondent had worked in education and adult education, the greater were the chances that he or she would have completed the doctoral program.

It was also interesting to note that males worked significantly more years than females in both education and adult education.

MA Thesis Writing

For this selected characteristic, respondents were asked whether they were required to write a thesis for their MA program. The frequency of responses are shown in Table 4:25.

Table 4:25 Respondents Who Wrote MA Thesis by C vs. NC and Sex (Column Percentages in Parentheses)

	Did Write MA Thesis	Did Not Write MA Thesis
Total	34 (41.5)	47 (57.3)
C's	19 (40.4)	28 (59.6)
NC's	15 (42.9)	19 (54.3)
Males	22 (44.9)	27 (55.1)
Females	12 (36.4)	20 (60.6)

Chi Square analyses of the above shows that there was no significant relationship between MA thesis writing and C vs. NC. However, MA thesis writing and sex yielded a marginally significant relationship. Following in Table 4:26 the Chi Square is summarized.

Table 4:26 Chi Square Analyses Between MA Thesis Writing by C vs. NC and Sex

	C vs. NC	Sex
MA Thesis Writing	$\chi^2 = .01 (d.f. = 1) p = .92$	$\chi^2 = .18 (d.f. = 1) p = .07$

Writing an MA thesis does not appear to be related to C vs NC. More males, however, wrote an MA thesis than did females in the doctoral program in Adult and Continuing Education (ACE) at Michigan State University (MSU).

Job Pressure to Get Degree

Job pressure to get a degree was posed to respondents with the following question: From your perception was there pressure at your past positions for you to get a degree? Respondents were asked to answer either yes or no. Table 4:27 shows the frequency of responses.

Table 4:27 Job Pressure to Get Degree with C vs. NC and Sex (Column Percentages in Parentheses)

	Was Job Pressure	Was Not Job Pressure
Total	27 (32.9)	54 (65.9)
C's	15 (31.9)	32 (68.1)
NC's	12 (34.3)	22 (62.9)
Males	21 (42.9)	28 (57.1)
Females	6 (18.2)	26 (78.8)

Analyzing the above using a Chi Square, it can be seen that, while there was no relationship between job pressure to get a degree and C vs. NC, there was a relationship with sex. These relationships are seen in Table 4:28.

Table 4:28 Chi Square Analyses Between Job Pressure to Get a Degree and C vs. NC or Sex

	C vs. NC	Sex
Job Pressure to Get Degree	$\chi^2 = .006 (d.f. = 1) p = .94$	$\chi^2 = 4.04 (d.f. = 1) p = .05$

Perceived job pressure to get a degree was not related to whether a doctoral student in ACE completes or not. However, job pressure was significantly greater for males than for females.

Quarters Registered at MSU

The number of quarters a doctoral student registered for course work or dissertation credits was examined to see if there was a relationship to C vs. NC or to sex. Table 4:29 shows the mean number of quarters for which respondents were registered at MSU by C vs. NC and by sex.

Table 4:29 Mean Number of Quarters Registered at MSU
by C vs. NC and Sex.

	Total	C's	NC's	Males	Females
Quarters Registered at MSU	13.9	13.5	14.4	15.1	12.3

Analysis reveals that there were no significant relationships between the number of quarters registered for course work or dissertation credits at MSU and C vs. NC or sex. Table 4:30 summarizes this information.

Table 4:30 Pearson Correlations and Quarters Registered
at MSU by C vs. NC and Sex.

	C vs. NC	Sex
Quarters Registered at MSU	$r^2 = .001, p = .39$	$r^2 = -.001, p = .16$

Perceived Control Over Degree Completion

Whether doctoral students in ACE perceived they had control over their own degree completion was also examined. As Table 4:31 illustrates, respondents answered this inquiry with the following frequency of responses.

Table 4:31 Perceived Control Over Ph.D. Completion by C vs. NC and Sex (Column Percentages in Parentheses)

	Did Have Control	Did Not Have Control
Total	74 (90.2)	5 (6.1)
C's	44 (93.6)	2 (4.3)
NC's	30 (85.7)	3 (8.6)
Males	46 (93.9)	1 (2.0)
Females	28 (84.8)	4 (12.1)

Analyzing this data using a Chi Square, Table 4:32 yielded the following results:

Table 4:32 Chi Square Analyses of Perceived Control Over Ph.D. Completion by C vs. NC and Sex

	C vs. NC	Sex
Perceived Control Over Ph.D. Completion	$\chi^2=.15(d.f.=1)p=.70$	$\chi^2=1.93(d.f.=1)p=.17$

Table 4:32 illustrates that there does not appear to be a significant relationship between whether respondents perceived they had control over their own degree completion and whether or not they actually were a C or NC. There were also no significant sex differences.

Part-Time Student Status

This selected characteristic of doctoral students examined what percentage of doctoral studies were done on a part-time basis. Table 4:33 summarizes the above.

Table 4:33 Mean Percentages of Doctoral Studies Done on a Part-Time Basis by C vs. NC and Sex

	Total	C's	NC's	Males	Females
Part-Time Doctoral Studies	62.3	60.6	64.6	61.7	63.1

Data analysis using a Pearson correlation indicates that there was no significant relationship between the percentage of part-time doctoral studies one assumes and C vs. NC or sex. Following, in Table 4:34, the Pearson correlations are reported.

Table 4:34. Pearson Correlations of Part-Time Doctoral Studies by C vs. NC and Sex

	C vs. NC	Sex
Part-Time Doctoral Studies	$r^2 = .003, p = .34$	$r^2 = .0003, p = .44$

Analyses indicate that whether a doctoral student pursues his or her program taking a high or low percentage of part-time studies does not seem to have a relationship to C vs. NC or to sex.

Publications

The number of times published was examined to see if there was a relationship between C vs. NC or sex. Respondents were asked to indicate whether they had not published at all or published one time or more. Results of the mean frequencies of responses and their respective percentages are summarized in Table 4:35.

Table 4:35 Mean Frequency of Responses of Times Published with C vs. NC and Sex (Column Percentages in Parentheses)

	Did Not Publish	Published One or More Times
Total	30 (36.6)	51 (62.2)
C's	11 (23.4)	36 (76.6)
NC's	19 (54.3)	15 (42.9)
Males	18 (36.7)	31 (63.3)
Females	12 (36.4)	20 (60.6)

Using Chi Square analyses, the following table summarizes the frequency of times published by C vs. NC and by sex.

Table 4:36 Chi Square Analyses of Times Published by C vs. NC and with Sex

	C vs. NC	Sex
Times Published	$\chi^2=7.58(d.f.=1)p=.006$	$\chi^2=.0(d.f.=1)p=1.0$

The number of times a respondent published was significantly related to C vs. NC. C's were significantly more likely to publish one or more times than were NC's. However, it is possible that C's published most often after they had completed their doctoral programs. This finding, therefore, may have little utility for determining who will complete a doctoral program and who will not. Chi Square analysis of sex and times published showed there were no significant differences.

Professional Organizations

Membership in professional organizations was posed to respondents with a dichotomous "yes", I belong or "no", I do not belong response option. The frequency of responses were as follows in Table 4:37.

Table 4:37 Responses of Membership in Professional Organizations Between C vs. NC and Sex
(Column Percentages in Parentheses)

	Yes	No
Total	69 (84.1)	12 (14.6)
C's	41 (87.2)	6 (12.8)
NC's	28 (80.0)	6 (17.1)
Males	40 (81.6)	9 (18.4)
Females	29 (87.9)	3 (9.1)

Table 4:38 illustrates, using Chi Square analyses, that the difference between the frequencies of Completers (C's) vs. Non-Completers (NC's) and sex were not significantly related to whether doctoral students in ACE at MSU were members in professional organizations.

Table 4:38 Chi Square Analyses of Membership in Professional Organizations by C vs. NC and Sex

	C vs. NC	Sex
Membership in Professional Organizations	$\chi^2=.09(d.f.=1)p=.77$	$\chi^2=.63(d.f.=1)p=.43$

Progression Toward Doctoral Degree

For this selected characteristic, respondents were instructed to read a series of 13 responses all relating to how far they had progressed in their doctoral studies. Students checked the response that best described their current progress. Following, in Table 4:39 will be a frequency count of those responses.

Table 4:39 Responses to Progression in Doctoral Studies
(Percentages in Parentheses)

Response Category	Frequency	Cumulative Frequency
Completed some of doctoral course work (1-30 credits)	2 (2.4)	2 (2.4)
Completed most of doctoral course work (31+ credits)	8 (9.8)	10 (12.2)
Completed all doctoral course work but have not taken comprehensive examinations yet	3 (3.7)	13 (15.9)
Did not take comprehensive exams	8 (9.8)	21 (25.7)
Took comprehensive exams but did not pass	0 (0.0)	21 (25.7)
Passed comprehensive exams	6 (7.3)	27 (33.0)
Met with committee who approved dissertation proposal	1 (1.2)	28 (34.2)
Met with committee who did not approve dissertation proposal	0 (0.0)	28 (34.2)
Completed part of dissertation after proposal was accepted but not data gathering	0 (0.0)	28 (34.2)
Completed data gathering	5 (6.1)	33 (40.3)
Completed all of dissertation but not orals	2 (2.4)	35 (42.7)
Met with committee for final orals in defense of dissertation	0 (0.0)	35 (42.7)
Awarded degree	47 (57.3)	82 (100)

Table 4:39 shows that there were three stages of completion checked by no one. It appeared as if none of the respondents were prolonged at the following points:

1. Took comprehensive exams but did not pass, 2. Met with committee who did not approve dissertation proposal,
3. Completed part of dissertation after proposal was accepted but not data gathering.

In contrast to the above, there were four response items with five checks or more. In particular, there were eight checks by both "Completed most of doctoral course work (31+ credits)" and "Did not take comprehensive exams". In addition, six respondents checked "Passed comprehensive exams" and five respondents checked "Completed my data gathering". There appeared to be more students congregated at the above stages in doctoral studies than any others. Therefore, it can be said that the factors of "Final course work completion" and "Not taking comprehensive examinations", seemed to be the two largest problem areas in doctoral progression. "Passing the comprehensive exams" and "Completing data gathering" were also important factors.

Factors Determining Degree Completion

This selected characteristic was designed to analyze if there was a relationship between specified factors and C vs. NC and sex. Respondents rated these factors indicating whether they were supportive or non-supportive in determining their ability to finish their doctoral studies. A

five point scale was used ranging from strongly non-supportive to strongly supportive. Appendix G summarizes the responses of the selected factors. Also listed in Appendix G are the respective frequencies for C's, NC's, males and females.

The means for the frequencies presented in Appendix G are shown in Table 4:40.

Table 4:40 Means of Factors Used in Determining Ability to Finish Doctoral Studies by C vs. NC and Sex (N's are shown in parentheses)

Factor Name	Total	C's	NC's	Males	Females
Financial Situation	3.5 (78)	3.7 (47)	3.2 (31)	3.4 (47)	3.7 (31)
Rapport with Faculty and Staff	4.1 (77)	4.1 (46)	4.1 (31)	3.9 (46)	4.5 (31)
Research Readiness for Dissertation	3.4 (77)	3.5 (47)	3.2 (30)	3.1 (46)	3.7 (29)
Ability to Isolate, Define and Research Problem	3.5 (77)	3.6 (47)	3.4 (30)	3.2 (46)	3.9 (31)
Effective Study Habits	3.9 (61)	4.0 (14)	3.7 (47)	3.7 (46)	4.1 (15)
Rapport with Guidance Committee and Chairman	4.3 (77)	4.3 (47)	4.3 (30)	4.1 (46)	4.5 (31)
Primary Support Group with Family	4.1 (77)	4.3 (47)	3.9 (30)	4.2 (46)	4.1 (31)
Primary Support Group with Friends	3.4 (77)	3.5 (46)	3.4 (31)	3.2 (47)	3.8 (30)
Primary Support Group with Colleagues	3.4 (78)	3.5 (47)	3.4 (31)	3.4 (47)	3.5 (31)
Physical Health	4.1 (78)	4.2 (47)	4.1 (31)	4.1 (47)	4.2 (31)
Moving Away from Major Education Institution	2.5 (53)	2.5 (31)	2.6 (22)	2.5 (33)	2.7 (20)
Sense of Long-Term Significance of Doctorate	4.3 (76)	4.2 (46)	4.3 (30)	4.2 (45)	4.5 (31)

The relationships between the above factors is summarized by Pearson correlations in Table 4:41.

Table 4:41 Pearson Correlations Between Factors Used in Determining Ability to Complete Doctoral Studies by C vs. NC and Sex

Factor Name	C vs. NC	Sex
Financial Situation	$r^2 = -.03, p = .06^{**}$	$r^2 = .02, p = .11$
Rapport with Faculty and Staff	$r^2 = -.001, p = .38$	$r^2 = .09, p = .004^*$
Research Readiness for Dissertation	$r^2 = -.02, p = .14$	$r^2 = .07, p = .01^*$
Ability to Isolate, Define and Research Problem	$r^2 = -.005, p = .27$	$r^2 = .10, p = .003^*$
Effective Study Habits	$r^2 = -.02, p = .09^{**}$	$r^2 = .04, p = .05^*$
Rapport with Guidance Committee and Chairman	$r^2 = -.003, p = .44$	$r^2 = .05, p = .03^*$
Primary Support Group with Family	$r^2 = -.03, p = .05^*$	$r^2 = -.001, p = .46$
Primary Support Group with Friends	$r^2 = -.0003, p = .44$	$r^2 = .05, p = .02^*$
Primary Support Group with Colleagues	$r^2 = -.003, p = .31$	$r^2 = .0006, p = .42$
Physical Health	$r^2 = -.004, p = .30$	$r^2 = .009, p = .21$
Moving Away From Major Education Institution	$r^2 = .001, p = .40$	$r^2 = .007, p = .28$
Sense of Long-Term Significance of Doctorate	$r^2 = .003, p = .34$	$r^2 = .02, p = .09^{**}$

* Significance at $p \leq .05$

** Marginally Significant at $.051 \leq p \leq .10$

The results show that C's rated the factor "primary support group with family" as being significantly more supportive than did NC's. The ratings of C's were also higher (marginally significant) for "financial situation" and "effective study habits".

Females rated a number of factors as being significantly more supportive than did males. These factors include: "rapport with faculty and staff", "research readiness for the dissertation", "ability to isolate, define and research problem", "effective study habits", "rapport with guidance committee and chairman" and "primary support group with friends".

Finally, the last factor used for this selected characteristic was "other", an open-ended response. The responses, which were all interesting to note, are listed in Table 4:42 and separated according to Completers (C's) vs. Non-Completers (NC's) and whether the responses were strongly non-supportive (answering 1 or 2, on a scale of 1 to 5) or strongly supportive (answering 4 or 5 on a scale of 1 to 5).

Table 4:42 Open-Ended Responses to Supportive or Non-Supportive Factors in Determining Ability to Finish Doctoral Studies by C vs. NC

Completers -- strongly non-supportive factors

Motivation
My rapport with guidance committee

Completers -- strongly supportive factors

High motivation, my need to finish
My rapport with guidance committee chairman
My love for learning
Sense of need of personal achievement
My husband
Strong achievement goals (2 responses)
Pride
Personal determination
Names of specific MSU ACE faculty (4 responses)
My like for educational community
Interest in subject matter
Having time constraints--only three years to do it
Changed chairman (2 responses)
To keep my job
Unwillingness to leave something unfinished

Non-Completers -- strongly non-supportive factors

None listed

Non-Completers -- Strongly supportive factors

Motivation, absolute intent to finish
Personal achievement
Sense of mission in terms of implications of research study
Need for degree in order to serve a specific position
Commitment to finishing something I had started

It appears that "personal achievement" and "motivation" rated highly for individuals who were C's and NC's.

In addition, C's felt that "changing chairmen" and "specific faculty members" were strongly supportive in determining their ability to finish their doctoral studies.

Life Change Check List Effects on Degree Completion

Using excerpts from the Holmes and Rahe Life Change Check List (also known as the Social Readjustment Rating Scale), respondents were asked first whether the life event occurred to them when they were working on their Ph.D. Secondly, they were asked, if it did occur, to rate the impact of the life event. Respondents rated the impact on a scale from one (no impact) to five (significant impact). Appendix H summarizes the responses of respondents by C vs. NC and by sex. Responses are shown only where the life event actually occurred to the respondent.

Whether an event occurred could have had an impact on students' continuation or non-continuation in the doctoral program. Table 4:43 summarizes Chi Square analyses of Completers (C's) vs. Non-Completers (NC's) and sex by the Life Change Check List events.

Table 4:43 Chi Square Analyses of Whether the Life Event Occurred by C vs. NC and Sex

Life Event	C vs. NC	Sex
Death of Spouse	$\chi^2=.03(d.f.=1)p=.87$	$\chi^2=.04(d.f.=1)p=.85$
Divorce	$\chi^2=.03(d.f.=1)p=.86$	$\chi^2=.85(d.f.=1)p=.36$
Marital Separation	$\chi^2=.0005(d.f.=1)p=.98$	$\chi^2=.91(d.f.=1)p=.34$
Death of Close Family Member	$\chi^2=.13(d.f.=1)p=.72$	$\chi^2=.23(d.f.=1)p=.63$
Marriage	$\chi^2=.79(d.f.=1)p=.37$	$\chi^2=.003(d.f.=1)p=.96$
Marital Reconciliation	$\chi^2=2.28(d.f.=1)p=.13$	$\chi^2=.13(d.f.=1)p=.72$
Major Change in Health of Family	$\chi^2=.89(d.f.=1)p=.35$	$\chi^2=1.07(d.f.=1)p=.30$
Pregnancy	$\chi^2=.96(d.f.=1)p=.33$	$\chi^2=.00(d.f.=1)p=1.0$
Addition of New Family Member	$\chi^2=.00(d.f.=1)p=1.0$	$\chi^2=.09(d.f.=1)p=.77$
Son or Daughter Leaving Home	$\chi^2=.47(d.f.=1)p=.49$	$\chi^2=.00(d.f.=1)p=1.0$
Spouse Starting or Ending Work	$\chi^2=.0008(d.f.=1)p=.98$	$\chi^2=3.19(d.f.=1)p=.07^{**}$
Major Personal Injury or Illness	$\chi^2=.00(d.f.=1)p=1.0$	$\chi^2=.004(d.f.=1)p=.95$
Outstanding Personal Achievement	$\chi^2=.00(d.f.=1)p=1.0$	$\chi^2=.67(d.f.=1)p=.41$
Major Change in Living Conditions	$\chi^2=2.79(d.f.=1)p=.09$	$\chi^2=.81(d.f.=1)p=.37$
Change in Residence	$\chi^2=1.38(d.f.=1)p=.79$	$\chi^2=.00(D.f.=1)p=1.0$

Table 4:43 (cont'd.).

Life Event	C vs. NC	Sex
Being Fired From Work	$\chi^2=1.68(d.f.=1)p=.20$	$\chi^2=.32(d.f.=1)p=.57$
Changing to a Different Line of Work	$\chi^2=.15(d.f.=1)p=.70$	$\chi^2=2.86(d.f.=1)p=.09^{**}$
Major Change in Work Responsibilities	$\chi^2=.98(d.f.=1)p=.32$	$\chi^2=.00(d.f.=1)p=1.0$
Trouble With Boss	$\chi^2=.10(d.f.=1)p=.76$	$\chi^2=1.89(d.f.=1)p=.17$
Major Change in Work Conditions	$\chi^2=.19(d.f.=1)p=.67$	$\chi^2=2.59(d.f.=1)p=.11$

* Significance at $p \leq .05$

** Marginally Significant at $.051 \leq p \leq .10$

Only three marginally significant relationships were found in Table 4:43. Non-completers were more likely than completers to record a "major change in living conditions". Males were more likely than females to have their "spouse starting or ending work". Finally, females were more likely than males to report "changing to a different line of work".

The total number of life change events reported to have occurred for each respondent was then determined. The mean number of life change events reported by NC's ($\bar{X}=4.66$) was greater than the mean number reported by C's ($\bar{X}=3.96$).

This difference was not significant, however ($r^2=.02, p=.13$). Females reported a larger number of life change events had occurred ($\bar{X}=4.82$) than did males ($\bar{X}=3.88$). This difference was marginally significant ($r^2=.03, p=.07$).

Given that a life change event had occurred, it was then determined whether the event had the same impact on different groups of respondents. C's (completers) who had the event occur were compared to NC's (non-completers) and males were compared to females (see Tables 4:44 and 4:45).

Table 4:44 Means of Life Change Ceck List Ratings on
Impact of Continuation or Non-Continuation
by C vs. NC and Sex ("-" Indicates No Response
and N's are Shown in Parentheses)

Life Event	Total	C's	NC's	Males	Females
Death of Spouse	5.0 (1)	- (0)	5.0 (1)	- (0)	5.0 (1)
Divorce	2.8 (4)	3.3 (3)	1.0 (1)	3.0 (1)	2.7 (3)
Marital Separation	3.7 (6)	4.0 (3)	3.3 (3)	4.0 (2)	3.5 (4)
Death of Close Family Member	2.6 (19)	3.0 (10)	2.1 (9)	2.2 (10)	3.0 (9)
Marriage	3.8 (19)	4.0 (9)	3.7 (10)	3.9 (12)	3.7 (7)
Marital Reconciliation	4.7 (3)	- (0)	4.7 (3)	4.0 (1)	5.0 (2)
Major Change in Health of Family	3.8 (10)	3.5 (4)	4.0 (6)	2.5 (4)	4.7 (6)
Pregnancy	2.7 (15)	2.0 (11)	4.5 (4)	2.8 (9)	2.5 (6)
Addition of New Family Member	2.9 (15)	2.2 (9)	3.8 (6)	3.0 (8)	2.7 (7)
Son or Daughter Leaving Home	2.5 (11)	2.9 (8)	1.7 (3)	2.7 (7)	2.3 (4)
Spouse Starting or Ending Work	4.0 (25)	4.0 (14)	3.9 (11)	4.1 (19)	3.7 (6)
Major Personal Injury or Illness	3.1 (11)	2.8 (6)	3.4 (5)	2.8 (6)	3.4 (5)
Outstanding Personal Achievement	3.5 (35)	3.3 (20)	3.9 (15)	3.6 (19)	3.5 (16)

Table 4:44 (cont'd.).

Life Event	Total	C's	NC's	Males	Females
Major Change in Living Conditions	3.8 (29)	3.8 (13)	3.8 (16)	3.8 (15)	3.8 (14)
Change in Residence	3.3 (41)	3.2 (21)	3.4 (20)	3.3 (25)	3.3 (16)
Being Fired From Work	4.0 (7)	3.0 (2)	4.4 (4)	4.7 (3)	3.5 (4)
Changing to a Different Line of Work	4.1 (28)	4.1 (15)	4.0 (13)	3.9 (13)	4.2 (15)
Major Change in Work Responsibilities	3.9 (42)	4.0 (22)	3.7 (20)	3.8 (25)	3.9 (17)
Trouble with Boss	3.4 (7)	3.2 (5)	4.0 (2)	3.5 (2)	3.4 (5)
Major Change in Working Conditions	3.7 (21)	3.8 (11)	3.5 (10)	3.3 (9)	3.9 (12)

Table 4:45 Pearson Correlations of Impact of Life Change
Check List Events with C vs. NC and Sex

Life Event	C vs. NC	Sex
Death of Spouse	N too small for analysis	
Divorce	$r^2 = -.86, p = .04^*$	$r^2 = -.018, p = .43$
Marital Separation	$r^2 = -.06, p = .32$	$r^2 = -.03, p = .37$
Death of Close Family Member	$r^2 = -.10, p = .09^{**}$	$r^2 = .08, p = .12$
Marriage	$r^2 = -.02, p = .28$	$r^2 = -.009, p = .35$
Marital Reconciliation	N too small for analysis	
Major Change in Health of Family	$r^2 = .03, p = .32$	$r^2 = .52, p = .009^{**}$
Pregnancy	$r^2 = .55, p = .001^*$	$r^2 = -.008, p = .37$
Addition of New Family Member	$r^2 = .31, p = .02^*$	$r^2 = -.01, p = .36$
Son or Daughter Leaving Home	$r^2 = -.25, p = .06^{**}$	$r^2 = -.04, p = .27$
Spouse Starting or Ending Work	$r^2 = -.001, p = .43$	$r^2 = -.02, p = .27$
Major Personal Injury or Illness	$r^2 = .05, p = .26$	$r^2 = .05, p = .26$
Outstanding Personal Achievement	$r^2 = .06, p = .08^{**}$	$r^2 = -.001, p = .42$
Major Change in Living Conditions	$r^2 = -.002, p = .41$	$r^2 = -.00004, p = .49$
Change in Residence	$r^2 = .002, p = .40$	$r^2 = -.0006, p = .44$
Being Fired From Work	$r^2 = .20, p = .16$	$r^2 = -.17, p = .18$
Changing to a Different Line of Work	$r^2 = -.004, p = .37$	$r^2 = .02, p = .24$

Table 4:45 (cont'd.).

Life Event	C vs. NC	Sex
Major Change in Work Responsibilities	$r^2 = -.02, p = .19$	$r^2 = .0004, p = .45$
Trouble With Boss	$r^2 = .09, p = .25$	$r^2 = -.001, p = .47$
Major Change in Working Conditions	$r^2 = -.01, p = .30$	$r^2 = .05, p = .17$

* Significance at $p \leq .05$

** Marginally Significant at $.051 \leq p \leq .10$

Only respondents who indicated that the particular event had occurred in their lives were included in these analyses. This resulted in small N's for many of these events which made the finding of significant relationships less likely.

Results of Pearson correlation analyses yielded several events from the Life Change Check List, however, that were significantly related to C vs. NC. Examination of the correlations with sex showed only one significant relationship in the life change events.

The life event "divorce", was significantly correlated to C vs. NC ($r^2 = -.86, p = .04$). This negative relationship indicated that divorce appeared to have a more significant impact on C's ($\bar{X} = 3.3$) than on NC's ($\bar{X} = 1.0$). The NC's felt that divorce had a less significant impact on their continuation or non-continuation in the ACE doctoral program.

"Death of a close family member" had a marginally significant relationship with C vs. NC ($r^2 = -.10, p = .09$). Of those respondents who had a "death of a close family member", C's ($\bar{X} = 3.0$) were more likely to feel that this had a significant impact on their continuation or non-continuation in the program than NC's ($\bar{X} = 2.1$).

The "pregnancy" life event yielded a significant relationship with C vs. NC ($r^2 = .55, p = .001$). C's ($\bar{X} = 2.0$) felt that pregnancy had less of an impact on their continuation (or non-continuation) in the ACE doctoral program than did NC's ($\bar{X} = 4.5$).

The life change event, "addition of a new family member", was similar to "pregnancy" in that the results yielded a significant correlation ($r^2 = .31, p = .02$). Non-completers ($\bar{X} = 3.8$), more than completers ($\bar{X} = 2.2$), felt that the "addition of a new family member" had an impact on their continuation or non-continuation in the doctoral program.

There was a marginally significant relationship between "son or daughter leaving home" and C vs. NC ($r^2 = -.25, p = .06$). Apparently, C's ($\bar{X} = 2.9$) were more influenced by this life event than were NC's ($\bar{X} = 1.7$).

The last relationship found was with "outstanding personal achievement" and C vs. NC. This relationship was marginally significant ($r^2 = .06, p = .08$). C's ($\bar{X} = 3.3$) seemed less likely than NC's ($\bar{X} = 3.9$) to feel that an "outstanding personal achievement" had an impact on their completing or not completing the Ph.D.

Examination of the Life Change Check List yielded one apparent sex difference. There was a significant relationship between the event "major change in health of family" and sex ($r^2=.52, p=.009$). Females ($\bar{X}=4.7$) reported the occurrence of this life event to have more of an impact than did males ($\bar{X}=2.5$).

Summary

The focus of this study was on the characteristics of Completers (C's) and Non-Completers (NC's) in Adult and Continuing Education (ACE) at Michigan State University (MSU) from 1970 to 1980. The research questions centered on the similarities and differences of respondents in C vs. NC and sex based on a review of the literature.

The demographic variables of sex, marital status, nationality and race were examined. In the area of sex the respondents were comprised of 60% males and 40% females. There were no significant differences between males and females in whether they were C's or NC's.

In the area of marital status, 73.2% of the respondents were married. Chi Square analyses between marital status and C vs. NC showed that there was a marginally significant ($p=.07$) relationship between being married and completing the doctoral program. Chi Square analyses between marital status and sex showed that males were more likely to be married and females were more likely to be single.

Hierarchical regression analyses showed that the interaction between marital status and sex was not significantly related to C vs. NC.

In the area of nationality, 86.6% of the respondents were United States Citizens. For the area of race, a greater percentage of White students were C's than non-Whites, however, the differences were not significant.

Specific findings of selected characteristics of C's vs. NC's are summarized below.

Age

Most students in the study (52%) were clustered between the ages of 36 and 50. Pearson correlation analyses showed that in general, older students were more likely to complete the degree than younger students and that there were no significant differences between the ages of males and females.

Age Began and Completed BA

Using a Pearson correlation to examine C vs. NC and sex with age beginning and completing the BA, there were no significant findings. There was also no relationship between the number of years it took to complete the BA and C vs. NC or sex.

Age Began and Completed MA

There was no relationship between age beginning or completing the MA and C vs. NC. Females were significantly

older than their male counterparts when they began and completed the MA, however. In addition, there were no significant differences for males and females in their rate of receiving the MA. It was significant that females may take longer to complete their MA's than males.

Age Began and Interrupted Ph.D.

There was no relationship between this selected characteristic and C vs. NC or sex. Although, it is interesting to note that 24 (90%) of the total 32 NC's said they did intend to complete the degree. In addition, it was found that the students who began their Ph.D.'s were older in the early 1970's than in the late 1970's.

Time Lapse Between BA to MA and MA to Ph.D.

Pearson analyses yielded several significant relationships in this area. It was shown that NC's may be more likely to have a shorter number of years that have elapsed between the BA to MA than did C's. It was also marginally significant that males were more likely to begin their MA programs in a shorter number of years after receiving the BA than were females.

There was no relationship between C vs. NC and time lapse between the MA to Ph.D. However, it was marginally significant that males tended to be out of school longer after MA completion than were females.

Field of Study for BA and MA

An examination of respondents BA and MA degrees in Education or Non-education curricula was not significantly related to C vs. NC or sex.

GPA for BA, MA and Doctoral Program

Analyzing the self-reported GPA in respondents BA, MA and Ph.D. programs, there was a significant relationship for the variables of C vs. NC and sex. NC's had significantly higher BA and Ph.D. GPA's than did C's. Also, females had consistently higher GPA's than did males.

GPA in Education and Non-Education Courses

Examining self-reported GPA's in respondents doctoral program, Education and Non-education courses, there was a marginally significant relationship between C vs. NC and GPA in non-education courses. NC's had higher GPA's. In addition, females had higher GPA's than did males for education courses.

Years Worked in Education and Adult Education

There was a significant relationship between the number of years worked in Education and Adult Education and completing the doctoral degree. The more years that respondents worked in Education and Adult Education the greater were the chances that he or she would have completed the degree. Males, in addition, worked significantly more years than females in both Education and Adult Education.

MA Thesis Writing

Examination of MA thesis writing showed no significant relationship with C vs. NC. In the area of sex, however, there was a marginally significant finding indicating that males wrote more MA theses than did females.

Job Pressure to Get Degree

Job pressure to get a degree was not significantly related to completing or not completing the Ph.D. in ACE. However, job pressure was significantly greater for males than for females.

Quarters Registered at MSU

Examination of the number of quarters respondents were registered at MSU showed no significant relationships for either C's vs. NC's or for sex.

Perceived Control Over Degree Completion

There was no significant relationships for either C's vs. NC's or for sex in the area of perceived control over degree completion.

Part-Time Student Status

Whether a doctoral student pursues his or her program taking a high or low percentage of doctoral studies part-time showed no significant relationships with C vs. NC or with sex.

Publications

Data analyses indicated the C's were significantly more likely to publish one or more times than were NC's. Sex differences in this area were not apparent, however.

Professional Organizations

Examination of respondents membership in professional organizations by C vs. NC or to sex showed there were no significant relationships.

Progression Towards Doctoral Degree

Examination of respondents progression towards the doctoral degree seemed to indicate that the areas of "Final course work completion" and "Not taking comprehensive examinations" posed the two largest problem areas. "Passing the comprehensive exams" and "Completing data gathering" were also important.

Factors Determining Degree Completion

The results show that C's rated the factor "primary support group with family" as being significantly more supportive than did NC's. The ratings of C's were also higher (marginally significant) for "financial situation" and "effective study habits".

Females rated a number of factors as being significantly more supportive than did males. These factors include: "rapport with faculty and staff", "research readiness for the dissertation", "ability to isolate, define and

research problem", "effective study habits", "rapport with guidance committee and chairman" and "primary support group with friends".

Life Change Check List Effect on Degree Completion

Examining the relationship between whether the life event occurred with C vs. NC and sex revealed three marginally significant relationships.

The three marginally significant relationships are shown in Table 4: 43. Non-completers were more likely than completers to record a "major change in living conditions". Males were more likely than females to have their "spouse starting or ending work". Finally, females were more likely than males to report "changing to a different line of work".

Of the life change events examined in the study, inspection of the data revealed that means were higher for NC's (non-completers) than for C's (completers). Females reported that a larger number of life change events examined had occurred for them than did males.

The occurrence of a life event was examined by the degree of its impact on a respondents continuation or non-continuation in the doctoral program. Following is a list of the life events that respondents felt had a significant impact on C vs. NC.

1. Divorce (more impact for C's)
2. Death of Close Family Member (more impact for C's)

3. Pregnancy (more impact for NC's)
4. Addition of New Family Member (more impact for NC's)
5. Son or Daughter Leaving Home (more impact for C's)
6. Outstanding Personal Achievement (more impact for NC's)

The only sex difference that was significantly related to student's continuation or non-continuation was "Major change in health of family". This life event appeared to have been more of an impact for females than for males in the ACE doctoral program at MSU.

An important consideration in this study's findings on the Life Change Check List scale, however, is that there are many ways of responding to the various life events other than those addressed by this study. Caution must be noted in generalizing the findings of life change events. Because this study does not use or weight the life change events exactly the same as the original scale, the findings of this study in relation to the Life Change Check List (Social Rating Readjustment Scale) could be positive, negative or neutral.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study is to examine the similarities and differences of selected characteristics of doctoral students at Michigan State University (MSU) who are completers and non-completers of the Ph.D. in Adult and Continuing Education (ACE). A summary of the study follows. It will include the findings and discussion, conclusions, recommendations, and suggestions for further research.

Findings and Discussion

Following are each of the four research questions posed by this study. The nature of Research Questions A and B lend themselves to reporting findings whereas Research Questions C and D lend themselves to reporting conclusions and recommendations. The only exception to this format is Research Question C3, which by nature of the question will include findings of this study.

Research Question A

"What are some of the similarities and differences in selected characteristics of graduate students who are completers and non-completers of the doctorate?"

There were a number of significant relationships in the study that indicated that there were particular characteristics that differentiated C's from NC's. Following is a list of the significant and marginally significant relationships found. Marginally significant relationships are denoted with an asterisk at the end of the statement.

- There is a positive relationship between being married and completing the doctoral program.*
- Older students were more likely to have completed the degree than younger students.
- NC's have a shorter number of years that have elapsed between finishing the BA and beginning the MA degree than did C's.
- The more years that respondents worked in the areas of Education and Adult Education, the greater the chances that they would have completed their doctoral degrees.
- C's were more likely to have published one or more times than were NC's.
- NC's had significantly higher self-reported BA and Ph.D. GPA's than did C's. Because NC's are typically younger than C's it is possible that grade inflation was an important influence on these results.

- NC's self-reported GPA's in non-education courses were higher than for C's.* Perhaps NC's were more interested in non-education courses and devoted more energy to them.
- NC's reported the following factors were less supportive than did C's.

1. Primary support group with family
2. Financial situation*
3. Effective study habits*

- Life Change Check List:

- The total mean number of life change events that occurred was higher for NC's than for C's (4.66 vs. 3.96). This difference did not reach statistical significance, however ($p=.13$).
When the occurrence of each life change event was looked at separately, only one was found to be marginally significant. Non-completers were more likely than completers to record "a major change in living conditions."

- Life change events that occurred were examined by their degree of impact on respondents' continuation or non-continuation. The largest differences between C's and NC's were reported for the following events:

1. Divorce (more impact for C's)
2. Death of Close Family Member (more impact for C's)*

3. Son or Daughter Leaving Home (more impact for C's)*
4. Pregnancy (more impact for NC's)
5. Addition of New Family Member (more impact for NC's)
6. Outstanding Personal Achievement (more impact for NC's)*

Of those life events that were rated as having significantly more impact, it can be said that:

- a. "Divorce" - doctoral student completers felt that divorce made more of an impact than did NC's on their continuation and eventual completion in the doctoral program. Divorce appeared to be a positive factor for C's toward their degree completion.
- b. "Pregnancy" - doctoral student NC's indicated that pregnancy made a significant impact on their non-completion ($\bar{X}=4.5$ for NC's and $\bar{X}=2.0$ for C's) of the program. Pregnancy seemed to be a hindrance for some doctoral students when trying to complete their degrees.
- c. "Addition of a New Family Member" - NC's felt that this life event, as with pregnancy, hindered their chances of continuing in the doctoral program. Perhaps their ability to complete the degree was only delayed, however.

Research Question B

"Are there any particular characteristics that are significantly related to whether a student is a completer or non-completer of the doctorate?"

Michigan State University (MSU) Adult and Continuing Education doctoral student completers (C's) and non-completers (NC's) did not differ significantly on the following characteristics:

- Demographic variables including sex, nationality and race
- Age began and age completed BA and MA degrees
- Age began Ph.D. degree
- Time lapse between MA and Ph.D. degrees
- Field of study for BA and MA degrees
- Self-reported GPA's for MA degree
- Self-reported GPA's in education courses
- Whether they completed an MA thesis
- Job pressure to get a degree
- Number of quarters registered at MSU
- Perceived control over degree completion
- Percentage of time the student was enrolled with part-time status
- Membership in professional organizations

The doctoral student C's and NC's showed differing characteristics, however, in the following areas:

- Marital status
- Age
- Time lapse between the BA and MA degrees

- Years worked in education and non-education
- Whether or not the person has published
- "Factors" influencing degree completion or non-completion to include:
 - primary support group with family
 - financial situation
 - effective study habits
- Self-reported GPA's in non-education courses
- Self-reported BA and Ph.D. GPA's
- Impact of Life Change Check List events

Research Question C

"After examining some of the characteristics of graduate students in ACE who are completers and non-completers, what recommendations can be made to future doctoral students in this situation regarding: 1. the probability of their own particular characteristics affecting degree completion; 2. ways to overcome obstacles and promote the probability of completing the degree; and 3. characteristics that are typical of other ACE graduate students at MSU and how they progressed in their studies."

C1. Students should examine their own particular situations to determine if there are any potential problem areas. Attention should be directed to some of the important findings identified earlier.

For example, a student may want to be cautious about entering the ACE program if he or she has little experience working in the field. Being unmarried and having a poor financial situation are also associated with lack of success. It is possible that having a spouse, particularly a working

spouse, can reduce the economic difficulties associated with graduate school attendance. In any case, students should take note of their financial situations when considering whether or not to apply to this program.

In addition, students should examine whether they have certain other resources helpful to successful study in the program. They (especially males) should carefully consider the effectiveness of their study habits. Does the student have the most effective study habits to make completion of the doctoral program both timely and possible.

Students should examine their relationships with their families. Will their families be supportive of the student and understand and accept the outside demands placed upon him or her. Careful planning and evaluation should ensue with the graduate student's family before he or she begins the doctoral program in ACE.

C2. Students can enhance the probability that they will complete their degrees in a number of ways. Gaining experience in the field, particularly through long-term, stable employment, might be one way to improve one's chances of graduating. Another would be for students to make sure they have the financial resources to complete a number of years of education. Careful examination of financial aid opportunities might be in order here.

Certain students may also benefit from up-front discussions with faculty members if they are having

particular problems with the effectiveness of their study habits. Perhaps it might be necessary for some students to acknowledge their lack of preparation and arrange for the extra help or time that they need to complete their assigned work.

Assessing the stability of one's marital and family situation also might be very useful for a student. Divorce was reported to have more of an impact on C's than NC's. Marital reconciliation, on the other hand, only occurred for three non-completers who all rated it as having quite an impact. Perhaps divorced people felt more free to pursue their own education while those who had a marital reconciliation felt they had to compromise their own ambitions for the good of their relationships.

Anticipating changes in their family situations could potentially be very useful for students. Completers, for example, felt that a son or daughter leaving home had more of an impact on their degree completion than did non-completers. Perhaps completers somehow managed to successfully redirect their time and energy from children to schoolwork. Pregnancy, on the other hand, was rated by non-completers as having quite an impact while completers felt it had little impact. This is a good example of the large individual differences that were found for many of the life change events. Some people felt few effects from events that seemed to devastate others. Individual personality differences and learned behavior styles may account for much of

these differences. It may also be possible, for example, that some of the people planned for their pregnancies more thoroughly or anticipated problems that might be encountered.

This planning and anticipation of problems might also be important for those who move away from Michigan State University (MSU). This factor received the lowest "support" rating of any. Of note, however, is that completers and non-completers did not rate it differently. C's must have found not being near campus to be troublesome but they obviously were able to overcome these difficulties somehow.

C3. Adult and Continuing Education (ACE) graduate students at MSU from the years 1970 to 1980 who responded to this questionnaire consisted of 49 males (60%) and 33 females (40%). There were 60 married students (73%) and 18 (22%) who were single. The majority of the students were United States citizens (87%), compared to 9 (11%) who were International students. Racially, there were 66 (81%) White students with 8 (10%) Black, 4 (5%) Asian and 1 (1%) Hispanic. Students reported that their mean age when beginning the Ph.D. program was 35 although it was found that students were older in the early 1970's than in the later 1970's.

In examining sex differences of ACE students by the selected characteristics used in this study, numerous differences were found. Following is a list of the significant sex differences found with the marginally significant

relationships denoted by an asterisk at the end of the statement.

- Males were more likely to be married and females were more likely to be single.
- Females were older than males when they began and completed their MA degree.
- Males were more likely to begin the MA program in a shorter number of years after receiving the BA than were females.*
- Males were out of school longer after MA completion than were females.*
- Females' self-reported GPA's were higher for their BA and MA degrees than were males' self-reported GPA's.
- Females self-reported GPA's in education courses were higher than for males.
- Males worked more years in Education and Adult Education than did females.*
- A greater percentage of males wrote MA theses than did females.*
- Job pressure to finish a Ph.D. was greater for males than for females.
- There were several factors toward the ability to complete the degree that indicated sex differences. In all cases males felt the factors were less supportive toward degree completion or non-completion than did females:

1. Rapport with Faculty and Staff
2. Research Readiness for Dissertation
3. Ability to Isolate, Define and Research Problem
4. Effective Study Habits
5. Rapport with Guidance Committee and Chairman
6. Sense of Long-term Significance of Doctorate*

- Life Change Check List:

- Males were more likely than females to have their "Spouse Starting or Ending Work"
- Females were more likely than males to report "Changing to a Different Line of Work"*
- Females reported a larger number of life change events than did males*

There appeared to be some patterns that emerged when examining the stages of students' progress toward their degrees. Quite a number of students never completed their coursework. Most of those that did not complete their coursework seemed at least to have worked at it quite a while and to have finished the majority of it.

Comprehensive exams seemed to be an important milestone on the path to the doctorate. Many students seemed to get prolonged at this point and end up never taking these exams. It was also fairly common to pass these exams and then not progress any further. If comprehensive exams

were taken they were passed. No one took the exams who did not pass.

Those who passed comprehensive exams and did not quit right away almost always got at least as far as completing the data gathering for their dissertations. Once the data gathering was completed, however, a number of students progressed no further. There are a number of possible reasons why students would stop at this point. The task of analyzing and writing up the results may have appeared too time consuming to them. Once data gathering was accomplished some students may have become aware of major flaws in their experimental design resulting in their findings being of questionable value. It is also possible that the task of analyzing the data gathered may have been a task exceeding the capabilities of some students.

Most students, however, did not get stopped at any point along the way. They progressed to the last stage and completed their doctorates.

Research Question D

"What can academic advisors and professors of doctoral candidates do to increase the probabilities of their advisees completing the degree program."

Academic advisors and professors can promote students completing the Adult and Continuing Education (ACE) doctoral program in the following ways:

- Encourage students to maintain and develop strong ties with their families. Having social and informational meetings between faculty and families could possibly serve to enhance familial support.
- Help students consider early in their studies what topics they might want to cover in their comprehensive exams and for their dissertations. These are points at which students seem to be prolonged.
- Inform students of financial aid opportunities within the university, public and private sectors, and assist the students in finding paid internships to help accomodate financial situations.
- Encourage students (especially males) to learn and practice sound study habits. One way this can be facilitated is to direct students to the campus student learning center for special techniques they can learn. Perhaps extra time or direction could be provided by faculty members for students less academically prepared.
- Select students with more work experience in education and adult education knowing that they will have a better chance of completing the degree.
- Allow extra time for degree completion (in whatever stage) for those students who are pregnant and have an addition of a new family member.

- Be supportive and encouraging to students as they progress in the doctoral program particularly in the areas of completing doctoral course work, taking comprehensive exams and collecting data for the dissertation.
- Be especially aware of signals indicating male students are not properly prepared for research or are not building adequate rapport with faculty members.
- Discourage students from moving away from the MSU area until they finish their degrees. If they do move, careful planning beforehand and careful maintenance of communication lines after the move would be well advised.

Conclusions

In relation to the specific purpose of this study as stated in Chapter 1, the following conclusions were made based on the analysis of data presented.

1. There may be a relationship between being married and completing the doctoral degree in Adult and Continuing Education (ACE) at Michigan State University (MSU).
2. There seems to be a positive relationship between students' years of work experience in education and adult education and completing the ACE doctoral program.

3. For ACE doctoral non-completers the following factors seemed to indicate problems in degree continuation:
 - Financial situation
 - Primary support group with family and colleagues
 - Effective study habits
4. Most of the life change events addressed in this study do not appear to differentiate between completers (C's) and non-completers (NC's). The exceptions to this were "divorce," "death of a close family member*," "pregnancy," "addition of a new family member," "son or daughter leaving home*," or "outstanding personal achievement*" (asterisks denote marginal significance).
5. There may be a relationship with the number of times published and completing the degree. Whether or not this is before or after one has already completed the degree needs to be clearly established.
6. There appear to be some tangible ways for academic advisors and professors to facilitate students as they progress through the ACE doctoral program.
7. There appeared to be more students who were younger in the later 1970's than in the early 1970's.

8. Certain points on the path to completion of the doctorate appear to be more troublesome for some students than for others.

Recommendations

Many specific recommendations to doctoral students, academic advisors, and professors have already been discussed in Research Questions C1 and D. The following will focus on the study's more general recommendations:

1. There is a possibility that MSU and other higher education institutions may want to include years of work experience in education and adult education as one of the criteria for accepting prospective doctoral students.
2. Prospective doctoral students in Adult and Continuing Education (ACE) would probably profit by a written discussion or listing of characteristics of former completers and non-completers including a description of the sex differences found. Michigan State University (MSU) may want to consider developing such a paper.
3. Further exploration should be made of BA GPA's in relation to predicting Ph.D. completion.
4. The ACE graduate program at MSU may want to consider developing a doctoral student "learning center". The learning center would focus on helping students overcome academic and social problems that arise as a result of being an ACE doctoral student.

5. The academic advisors and professors at MSU and elsewhere should keep abreast of current ACE graduate student characteristics and how these characteristics are related to the ability of students to finish their degrees.
6. The department of Adult and Continuing Education at MSU may wish to further examine the Life Change Check List ratings of current and completing doctoral students. Although this study offers some clues as to where problems could arise, further analysis is essential.

Suggestions for Further Research

1. There needs to be more research on the characteristics of completers and non-completers of the Ph.D. in Adult and Continuing Education. It would be particularly fruitful to determine whether there are traits or characteristics not studied here that have a relationship to completing the doctoral degree.
2. It would be interesting to investigate actual GPA's of ACE doctoral students both in comparison to self-reported GPA's and as a tool in predicting completion of the program.
3. There should be research studies in ACE graduate programs at other universities and colleges to increase the generalizability of this study's findings.

4. Use of the Life Change Check List in distinguishing between the characteristics of completers and non-completers seems to offer some interesting and valuable information. More studies should be done in this area. In particular, it is recommended that large numbers of subjects be included in studies using this instrument. This would be necessary to ensure that each event (e.g. death of a spouse) occurred often enough that statistical analyses could be appropriately used.
5. Another study that would be fruitful using the Life Change Check List involves finding out why certain life events are impactful for some and not for others. It might be interesting to find out if some types of life events have impact for students with a particular characteristic and why. In addition, some of the recent literature on coping styles and locus of control might be appropriate to use in association with the Life Change Check List.
6. It should be noted that, because of the large number of tests of statistical significance performed, there is a strong possibility that some of the results of this study were obtained by chance. Both Type I error (finding a significant relationship where there is none) and Type II error (not finding

6. a significant relationship where one is in fact present) could have occurred in the analyses reported here. It is therefore recommended that the results of this study be replicated in other studies before being accepted without reservation.

APPENDIX A

HUMAN SUBJECTS APPROVAL LETTER

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824

October 6, 1981

Ms. Linda DeStigter
1694 Oxford Apt. A
Berkeley, California 94709

Dear Ms. DeStigter:

Subject: Proposal Entitled, "Similarities and Differences Between
Selected Characteristics of Doctoral Students in Adult
and Continuing Education at MSU Who are Completers and
Non-Completers of the Ph.D."

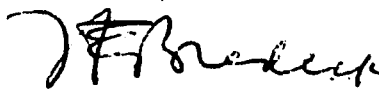
The above referenced project was recently submitted for review to the UCRIHS.

We are pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and the Committee, therefore, approved this project at its meeting on October 5, 1981.

Projects involving the use of human subjects must be reviewed at least annually. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to the anniversary date noted above.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,



Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

cc: Dr. Howard Hickey

APPENDIX B

STUDENT QUESTIONNAIRE

Date completed: _____

139

Questionnaire no. _____

Michigan State University
College of Education
Adult and Continuing Education
October, 1981

Please check or fill in the appropriate blanks.

1. Gender: ☐ male ☐ female
2. Marital Status: ☐ single ☐ married ☐ other _____
Please explain _____
3. Present age _____
4. Age when you began and age when you completed bachelors degree _____, _____
5. Age when you began and age when you completed masters degree _____, _____
Didn't complete masters degree _____
6. Age when you began and age when you interrupted your doctoral program _____, _____
7. If you did not complete your degree do you plan to complete?
☐ yes, _____
Please explain _____
☐ no _____
8. Nationality: ☐ U.S. Citizen ☐ International, please state country
of origin _____
9. Race: ☐ Asian ☐ White ☐ Other _____
Please explain _____
☐ Black ☐ Hispanic
10. How far have you progressed in your doctoral studies? (Do not include M.A. credits). Check all that apply.
 - ☐ Completed some of doctoral course work (1-30 credits)
 - ☐ Completed most of doctoral course work (31+ credits)
 - ☐ Completed all doctoral course work but have not taken comprehensive examinations yet
 - ☐ Did not take comprehensive exams
 - ☐ Took comprehensive exams but did not pass
 - ☐ Passed comprehensive exams
 - ☐ Met with committee who approved dissertation proposal
 - ☐ Met with committee who did not approve dissertation proposal
 - ☐ Completed part of dissertation after proposal was accepted but not data gathering
 - ☐ Completed my data gathering
 - ☐ Completed all of dissertation but not orals
 - ☐ Met with committee for final orals in defense of dissertation
 - ☐ Awarded degree

11. How many years elapsed between the time you completed your bachelors degree and began your masters program?_____
12. How many years elapsed between the time you completed your masters degree and began your doctoral program?_____
13. In what field of study was your bachelors degree?
 _____ Education, what was your major? _____
 _____ Non-Education, what was your major? _____
14. In what field of study was your masters degree?
 _____ Education, what was your major? _____
 _____ Non-Education, what was your major? _____
15. What was your overall grade point average (on a 4-point scale) for your bachelors degree?_____
16. What was your overall grade point average (on a 4-point scale) for your masters degree?_____
17. Were you required to write a thesis for your masters degree program?
 _____yes _____no
18. From your perception was there pressure at your past positions for you to get a degree? _____yes _____no
19. Which of the following factors were supportive or non-supportive in determining your ability to finish your doctoral studies? Circle one for each category.

	<u>Strongly Non-Supportive</u>				<u>Strongly Supportive</u>
my financial situation	1	2	3	4	5
my rapport with faculty and staff	1	2	3	4	5
my research readiness for dissertation	1	2	3	4	5
my ability to isolate, define and research problem	1	2	3	4	5
my effective study habits	1	2	3	4	5
my rapport with guidance committee and chairman	1	2	3	4	5
my primary support group with family	1	2	3	4	5
my primary support group with friends	1	2	3	4	5
my primary support group with colleagues	1	2	3	4	5
my physical health	1	2	3	4	5
my moving away from major education institution	1	2	3	4	5
my sense of long-term significance of doctorate	1	2	3	4	5
other, please explain	1	2	3	4	5

20. How many years have you worked in education? _____
21. How many years have you worked in adult education? _____
22. How many quarters were you registered at M.S.U. for course work and/or dissertation credits? _____
23. Following are selected items from the Holmes and Rahe Life Change Check List. Rate each of the following life events as they have impacted on your continuation or non-continuation of your doctoral program. Circle one number for each category. Don't complete the right side if the event did not occur.

<u>Occurred</u>	<u>Did Not Occur</u>		<u>No Impact</u>				<u>Significant Impact</u>
—	—	Death of Spouse	1	2	3	4	5
—	—	Divorce	1	2	3	4	5
—	—	Marital Separation	1	2	3	4	5
—	—	Death of Close Family Member	1	2	3	4	5
—	—	Marriage	1	2	3	4	5
—	—	Marital Reconciliation	1	2	3	4	5
—	—	Major Change in Health of Family	1	2	3	4	5
—	—	Pregnancy	1	2	3	4	5
—	—	Addition of New Family Member	1	2	3	4	5
—	—	Son or Daughter Leaving Home	1	2	3	4	5
—	—	Spouse Starting or Ending Work	1	2	3	4	5
—	—	Major Personal Injury or Illness	1	2	3	4	5
—	—	Outstanding Personal Achievement	1	2	3	4	5
—	—	Major Change in Living Conditions	1	2	3	4	5
—	—	Change in Residence	1	2	3	4	5
—	—	Being Fired From Work	1	2	3	4	5
—	—	Changing to Different Line of Work	1	2	3	4	5
—	—	Major Change in Work Responsibilities	1	2	3	4	5
—	—	Trouble With Boss	1	2	3	4	5
—	—	Major Change in Working Conditions	1	2	3	4	5

24. What was your overall grade point average (on a 4-point scale) in your doctoral program? _____
25. What was your overall grade point average (on a 4-point scale) in education courses in your doctoral program? _____
26. What was your overall grade point average (on a 4-point scale) in non-education courses taken during your doctoral program? _____
27. Did you have control over whether you could complete your doctoral studies?

_____ yes _____ no, _____
Please explain _____

28. What percentage of your doctoral studies were on a part-time basis? _____

29. How many times have you published?

_____ none _____ one, or more _____
Please explain _____

30. Do you belong to any professional organizations?

_____ yes, please list _____

_____ no

Thank you for completing the questionnaire.

APPENDIX C

LETTER ATTACHED TO QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION
ERICKSON HALL

EAST LANSING • MICHIGAN • 48824

October 19, 1981

Dear M.S.U. Student:

We are interested in doing a follow-up study of doctoral candidates in Adult and Continuing Education at Michigan State University. It is hoped, through this questionnaire, to determine some of the similarities and differences between completers and non-completers of the doctoral degree. Your input is very important to this study.

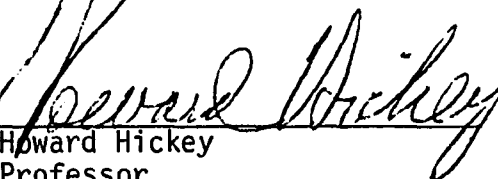
Please take approximately 10-15 minutes to complete the attached questionnaire and return it with a signed copy of the Consent Form in the enclosed self-addressed envelope. If you wish to see the results of this study, please complete and return the enclosed self-addressed postcard.

We want to assure you that your name will not be identified in any way in the course of this study. The questionnaire number is present only to enable us to determine who has responded. Any information is considered strictly confidential and will be treated with respect.

Your assistance and cooperation in completing this questionnaire is greatly appreciated. Thank you.

Sincerely,


Linda DeStigter
Graduate Student


Howard Hickey
Professor
Adult and Continuing Education

Attachment

APPENDIX D

FOLLOW-UP LETTER SENT TO STUDENT SAMPLE

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION

EAST LANSING • MICHIGAN • 48824

DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION

ERICKSON HALL

November 18, 1981

Dear Graduate Student Colleague:

About three weeks ago you should have received a research questionnaire concerning doctoral students in Adult and Continuing Education at M.S.U. As of this date, I have not received your response.

Knowing the great impact a study like this could have on doctoral students in Adult and Continuing Education, including their professors and academic advisors, I am particularly anxious to have the best representation that is possible. If your response and my reminder have crossed in the mail, I thank you for your support. If, however, you have not completed the questionnaire, please take approximately 10-15 minutes to respond to the questions, and mail it to me with the Consent Form in the enclosed, self-addressed envelope.

As an academic colleague with multiple roles of my own, I very much appreciate your taking time to assist me in completion of my research project. I look forward to hearing from you.

Sincerely,



Linda DeStigter
Graduate Student

Attachment

APPENDIX E

CONSENT FORM

Michigan State University

Graduate Research

Consent Form

In signing the following statement, I agree to participate in the research project being conducted by Linda DeStigter, and I acknowledge:

1. That I understand the purposes of the research project which have been explained to me;
2. That I will be expected to complete a questionnaire;
3. That I understand that my identity will remain anonymous and all results will remain confidential;
4. That I am voluntarily participating in the research project with no expectation to benefit from the results;
5. That I am free to withdraw from participation at any time without consequence.

Signature: _____

Date: _____

Questionnaire Number: _____

APPENDIX F

POSTCARD

p.1

Linda DeStigter
1694 Oxford Apt. A
Berkeley, CA 94709

p. 2

I have completed the questionnaire:

Name _____

Address _____

I would like a copy of the results yes no

APPENDIX G

FREQUENCY OF RESPONSES TO "FACTORS"

Appendix G: Frequencies of Non-Supportive and Supportive Factors in Determining Ability to Finish Doctoral Studies by C vs. NC and Sex ("-" means no response was made)

Name of Factor	Strongly Non-Supportive			Strongly Supportive	
	1	2	3	4	5
Financial Situation:					
C's	5	2	11	13	16
NC's	6	2	7	11	5
Males	8	3	11	14	11
Females	3	1	7	10	10
Rapport with Faculty and Staff:					
C's	1	1	5	23	16
NC's	-	4	5	7	15
Males	1	5	6	21	13
Females	-	-	4	9	18
Research Readiness for Dissertation:					
C's	4	7	10	14	12
NC's	-	7	13	7	3
Males	4	9	16	11	6
Females	-	5	7	10	9

Appendix G (cont'd.).

Name of Factor	Stongly Non-Supportive			Strongly Supportive	
	1	2	3	4	5
Ability to Isolate, Define and Research Problem:					
C's	4	4	11	18	10
NC's	-	6	9	12	3
Males	4	7	15	15	5
Females	-	3	5	15	8
Effective Study Habits:					
C's	-	2	3	4	5
NC's	-	4	10	14	19
Males	-	4	15	16	11
Females	-	4	4	7	16
Rapport with Guidance Committee and Chairman:					
C's	1	1	6	14	25
NC's	-	1	3	13	13
Males	1	2	6	18	19
Females	-	-	3	9	19

Appendix G (cont'd.).

Name of Factor	Strongly Non-Supportive			Strongly Supportive	
	1	2	3	4	5
Primary Support Group with Family:					
C's	1	1	7	12	26
NC's	1	4	3	11	11
Males	1	2	7	15	21
Females	1	3	3	8	16
Primary Support Group with Friends:					
C's	2	7	14	14	9
NC's	2	5	8	10	9
Males	3	8	16	15	5
Females	1	4	6	9	10
Primary Support Group with Colleagues:					
C's	-	4	21	18	4
NC's	3	5	5	14	4
Males	1	7	16	18	5
Females	2	2	10	14	3

Appendix G (cont'd.).

Name Factor	Strongly Non-Supportive			Strongly Supportive	
	1	2	3	4	5
Physical Health:					
C's	-	1	8	20	18
NC's	1	-	6	13	11
Males	-	1	10	21	15
Females	1	-	4	12	14
Moving Away from Major Education Institution:					
C's	7	5	15	4	-
NC's	4	4	12	1	1
Males	8	4	18	3	-
Females	3	5	9	2	1
Sense of Long Term Significance of Doctorate:					
C's	1	2	6	13	24
NC's	-	1	4	9	16
Males	-	2	8	16	19
Females	1	1	2	6	21

APPENDIX H

FREQUENCIES OF RESPONSES FOR
LIFE CHANGE CHECK LIST

Appendix H: Frequencies of Impact Scores on the Holmes and Rahe Life Change Check List by C vs. NC and Sex ("-" indicates no response)

Life Event	No Impact		Significant Impact		
	1	2	3	4	5
Death of Spouse:					
C's	-	-	-	-	-
NC's	-	-	-	-	1
Males	-	-	-	-	-
Females	-	-	-	-	1
Divorce:					
C's	-	-	2	1	-
NC's	1	-	-	-	-
Males	-	-	1	-	-
Females	1	-	1	1	-
Marital Separation:					
C's	-	-	1	1	1
NC's	1	-	-	1	1
Males	-	-	-	2	-
Females	1	-	1	-	2
Death of Close Family Member:					
C's	3	1	1	3	2
NC's	3	3	2	1	-
Males	4	3	-	3	-
Females	2	1	3	1	2

Appendix H (cont'd.).

Life Event	No Impact		Significant Impact		
	1	2	3	4	5
Marriage:					
C's	-	-	2	5	2
NC's	1	1	1	4	3
Males	-	1	1	8	2
Females	1	-	2	1	3
Marital Reconciliation:					
C's	-	-	-	-	-
NC's	-	-	-	1	2
Males	-	-	-	1	-
Females	-	-	-	-	2
Major Change in Health of Family:					
C's	-	2	-	-	2
NC's	1	-	-	2	3
Males	1	2	-	-	1
Females	-	-	-	2	4
Pregnancy:					
C's	4	5	1	-	1
NC's	-	-	-	2	2
Males	2	3	1	1	2
Females	2	2	-	1	1

Appendix H (cont'd.).

Life Event	No Impact			Significant Impact	
	1	2	3	4	5
Addition of New Family Member:					
C's	3	3	2	-	1
NC's	-	1	1	2	2
Males	1	3	1	1	2
Females	2	1	2	1	1
Son or Daughter Leaving Home:					
C's	1	2	2	3	-
NC's	1	2	-	-	-
Males	1	2	2	2	-
Females	1	2	-	1	-
Spouse Starting or Ending Work:					
C's	1	-	5	-	8
NC's	1	1	1	3	5
Males	1	1	4	3	10
Females	1	-	2	-	3
Major Personal Injury or Illness:					
C's	-	3	2	-	1
NC's	1	-	2	-	2
Males	1	1	3	-	1
Females	-	2	1	-	2

Appendix H (cont'd.).

Life Event	No Impact		Significant Impact		
	1	2	3	4	5
Outstanding Personal Achievement:					
C's	3	1	5	9	2
NC's	1	-	2	9	3
Males	1	1	4	12	1
Females	3	-	3	6	4
Major Change in Living Conditions:					
C's	-	-	5	5	3
NC's	1	2	3	4	6
Males	-	2	3	6	4
Females	1	-	5	3	5
Change in Residence:					
C's	2	5	6	2	6
NC's	3	3	4	4	6
Males	2	6	6	4	7
Females	3	2	4	2	5
Being Fired from Work:					
C's	1	-	-	-	1
NC's	-	-	1	1	3
Males	-	-	-	1	2
Females	1	-	1	-	2

Appendix H (cont'd.).

Life Event	No Impact		Significant Impact		
	1	2	3	4	5
Change to Different Line of Work:					
C's	-	-	4	5	6
NC's	1	-	3	3	6
Males	1	-	3	4	5
Females	-	-	4	4	7
Major Change in Work Responsibility:					
C's	1	1	2	11	7
NC's	1	2	5	6	6
Males	1	2	4	11	7
Females	1	1	3	6	6
Trouble with Boss:					
C's	1	-	1	3	-
NC's	-	-	1	-	1
Males	-	-	1	1	-
Females	1	-	1	2	1
Major Change in Work Conditions:					
C's	-	-	5	3	3
NC's	3	-	-	3	4
Males	2	-	2	3	2
Females	1	-	3	3	5

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