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Factors Related To Attrition From Doctor Of Education Programs In The College Of Human Resources And Education At West Virginia University (Nongraduates, Dropouts, Students).

Nancy Louise Valentine

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FACTORS RELATED TO ATTRITION FROM DOCTOR OF EDUCATION PROGRAMS IN THE COLLEGE OF HUMAN RESOURCES AND EDUCATION AT WEST VIRGINIA UNIVERSITY

West Virginia University ED.D. 1986

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FACTORS RELATED TO ATTRITION FROM DOCTOR OF EDUCATION PROGRAMS IN THE COLLEGE OF HUMAN RESOURCES AND EDUCATION AT WEST VIRGINIA UNIVERSITY

DISSERTATION

Submitted to the College of Human Resources and Education

of

West Virginia University

In Partial Fulfillment of the Requirements for

The Degree of Doctor of Education

by

Nancy Louise Valentine, A.B., M.A.

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CHAPTER I

THE PROBLEM

Introduction

Graduate education in the United States is more than 100 years old, dating from the establishment of the Johns Hopkins Graduate School in 1876. During this century, graduate education has experienced both progressive and regressive trends, but since the beginning of the 1980s, graduate education has seen a forecast of changing markets for graduates with advanced degrees, projected student population declines, and unstable and decreasing financial resources.

The decreasing job market for doctorate holders was reflected in a recent report of the National Research Council for the National Science Foundation (1983). This study indicated that the proportion of students seeking employment at the time the doctorate was received grew steadily through the 1970s, from 19% in 1969 to 27% in 1983. Employment for those who receive an EdD centers around academe, with about one half of the 1983 graduates securing academic positions. Smaller percentages of EdD recipients find employment in private industry or government.

A report from the Carnegie Council (1980) projected that during the next 20 years undergraduate enrollment in colleges and universities may decline by as much as 40% to 50%. Since undergraduate students constitute the available pool from which graduate students

are selected, this projected decline would drastically affect the graduate programs as well.

In addition to this projected decrease in population, current data indicate that after the peak years of the mid-1970s, there has been a noticable decline in the number of United States citizens receiving doctorates. The increasing number of foreign citizens earning doctorates in the United States prevents the overall decrease from being more severe (National Research Council, 1983).

The National Research Council Report (1983) further indicated that although the number of United States citizens earning doctorates in 1983 was about the same as in 1970, the 25- to 34-year-old age group (the average age range of doctoral students) more than doubled in size. This information reflects a significant change in the participation and/or completion rates of the 25- to 34-year-old cohort in graduate education at the doctoral level. In 1983 a far lower proportion of that population earned the doctorate than in 1960.

Therefore, any future increases in the number of students receiving the doctorate will have to come from overall increases in proportions of present United States college graduates earning the doctorate and foreign students. Also, greater emphasis will have to be placed on retaining the doctoral students already enrolled in programs. The Carnegie Council Report (1980) maintained that the decline in enrollments may be partly offset by exerting an all out effort to increase the retention rate of doctoral students.

Doctoral students are a unique type of student. In comparison with undergraduate and master's level students, they more often reflect the scholarly image of an institution and utilize more university resources (i.e., faculty time and energy, library facilities, and computer services). Practitioners in the field of education have long realized the loss of resources by students, faculty, and institutions, as a result of attrition from doctoral programs. Jacques Barzun (1958) called attention to the waste of student energy, hope, and money, and the waste of faculty time and effort which is a by-product of attrition, especially in the students who complete all requirements for the doctorate but the dissertation.

In another early document, Sir Hugh Taylor (1959) stated:

> If the graduate schools of the country would solve this problem of attrition, if we could determine whether (and if so, how) the proportion of successful candidates can be increased, we could raise the output of the graduate schools of the country without increased enrollment or additional expenditures for faculty and facilities. The schools owe it to themselves and to those who provide for their support, financially so expensive, to make a thorough examination of consensus in this matter. (p. 32-33)

A national study conducted by Allen Tucker (1964) also indicated that attrition at the doctoral level is looked upon as a waste of precious faculty time and a drain upon university resources already being used to capacity. Tinto (1982) also alluded to the financial implications of attrition. He viewed each withdrawal as a vacancy in the student body that might have been filled by someone who would have persisted. Thus, the attrition of individuals can cause serious financial strains upon the institution by undermining its continuing source of revenue.

The high attrition rate of students in doctoral programs has been a significant problem in the field of education for many years (Berelson, 1960; Edwards, 1944). In Graduate Education in the United States, a large-scale study conducted by Bernard Berelson (1960), one half of the deans of graduate schools regarded attrition as an important problem in higher education. After examining specific concerns of individuals who had completed all of the requirements for the doctorate except the dissertation (ABDs) by field and discipline, Sproull (1969/1970) found that doctoral attrition is more serious and particularly widespread in the field of education than in the arts and sciences.

As early as 1944 doctoral attrition ranged from 16% to 78% (Edwards, 1944). The Tucker (1964) study found that the overall national average for attrition from doctoral programs was 38.1%. Heiss (1970), in a study of the PhD programs in 10 major universities, found the drop out rate for doctoral students in top ranked institutions at 30%, and a rate of up to 50% in other institutions.

During a symposium at Bowdoin College, Cartter (1967) reported that the attrition rate for all students entering graduate school (at whatever level) was at least 50%. Carmichael (1961) found that at Columbia University, only 30.2% of the graduate students received the doctorate and 35.8% received the master's degree. In a longitudinal study between 1951 and 1962, Wright (1964) found that 50% who began on the master's level got the PhD, and 32% of the doctoral students who began with previous graduate degrees got the PhD. In a similar

study conducted at Emory University, Boozer (1972) found that approximately 70% of those students who began doctoral work at Emory did not finish the degree at that university.

While these facts and figures tend to imply that all students who do not complete their doctorates have failed, this is certainly not the case. There are many types of dropout behavior, each with different implications for the individual as well as for the institution (Tinto, 1982). The simple act of leaving an institution may have multiple and quite different meanings to those who are involved in, or are affected by, that behavior. Although an administrator or faculty member may define a leaving behavior as a failure to complete a given course of study, students may view leaving as a positive step toward completion of their own personal goals.

According to Tinto (1982), a great diversity of goals characterizes the intentions of entering students. Some goals neither coincide with EdD completion nor are necessarily compatible with those of the institution. Moreover, the person entering doctoral programs may not have clearly defined his or her goals, which may change during the course of study. For individuals who decide an EdD degree is not for them, this realization may not be a failure of the person. For some individuals, it may mean they have gained a more realistic view of their needs, long-term interests, and types of activities that lead to personal fulfillment.

Despite the commonly held view of many leading educators that attrition from doctoral programs is a national concern, Sternberg

(1981) discovered a dearth of national statistical information for the number of doctoral students enrolled, the number of people who have completed all requirements for the doctorate except the dissertation (ABDs), and on noncompletion rates in graduate school. In the process of conducting research, Sternberg found that:

> Not only are there no national statistics on ABDs, there are no national statistics on how many students are enrolled in doctoral programs separate from master's degree enrollments. At the local level of particular universities, graduate registrars were either vague and defensive about hard statistics on this group or even when eager to help, hard put to give satisfactory answers since their coding categories did not include attention to this specific status. (p. 4)

Sternberg (1981) also believed that this lack of graduate information has been disturbing for university administrators, deans, chairpersons, and faculty.

In addition to this lack of quantitative data, there is very little qualitative data available on doctoral students. There has been very little direct attention given to doctoral students by individual institutions. Hartnett and Katz (1977) believed:

> Because of the concentration of graduate schools on research, no one has particularly cared about student development. Or one might argue that because motivation and task-orientedness could be taken more for granted with graduate students than with undergraduates, there seemed to be no compelling need to pay much attention to graduate students. Whatever the reasons, the fact remains that very little attention has been given to the processes by which students become scholars and scientists and the environmental factors which help or hinder these processes. (p. 647)

At this time in the history of American higher education, more than ever before, administrators and faculty need to be concerned about the attrition rate of doctoral students. Universities can no

longer depend entirely on population growth to sustain enrollment in doctoral programs, nor can they afford to squander precious resources. If administrators and faculty are dedicated to maintaining quality doctoral programs, they can no longer ignore the embarrassingly high rate of attrition. Institutions must be willing to collect data on factors influencing attrition from doctoral programs and make the necessary changes, within their control, to improve the retention of capable individuals. The importance and uniqueness of the doctoral student cannot be overlooked.

Statement of the Problem

This study investigated possible relationships among some of the psychological, sociological, and economic characteristics of doctoral students and compared these characteristics to the students' completion or noncompletion of EdD degrees in the College of Human Resources and Education at West Virginia University.

The three basic research questions answered were:

1. What psychological, sociological, and economic characteristics of doctoral students are related to the successful completion of doctoral programs?

2. What psychological, sociological, and economic characteristics of doctoral students are related to the noncompletion of doctoral programs?

3. Are there significant differences in the psychological, sociological, and economic characteristics between doctoral students enrolled in each of the eight academic departments within the

college, and, if so, do these differences affect the completion or noncompletion of the EdD?

More specific than these three broad research questions were the variables on which graduates and nongraduates were analyzed. Those variables were:

1. Sex of the student
2. Race of the student
3. Marital status of the student while working on the doctorate
4. Number of children the student had while working on the doctorate
5. Student's age when beginning the doctorate
6. Student's age when completing or terminating the doctorate
7. Number of people from the student's immediate family who had pursued post secondary education
8. Educational level of the student's parents
9. Student's place of residence during formative years
10. Student's perception of personal support from individuals
11. Number of semesters spent by the student in full-time study
12. Student's place of residence during doctoral study
13. Physical health of the student during doctoral study
14. Emotional/psychological health of the student during doctoral study
15. Number of hours per week that the student was employed during doctoral study
16. Time period in which the student decided on his/her major field of study of the doctorate

17. Level of commitment to his/her career at the beginning of doctoral study

18. Student's motive for beginning doctoral study

19. Source of financial subsidy during doctoral study

20. Financial subsistence level during doctoral study

21. Relationship the student experienced with the faculty of his/her department during doctoral study

22. Relationship the student experienced with other students in his/her department during doctoral study

23. Relationship the student experienced with his/her doctoral committee during doctoral study

24. Relationship the student experienced with his/her faculty advisor during doctoral study

25. Relationship the student experienced with the chair of his/her doctoral committee

26. Student's perception of the quality and value of course work

27. Orientation the student received to the academic expectations of the department

28. Orientation the student received to graduate study in general

29. Difficulty incurred with the dissertation

30. Student's perception of the value of the doctorate

31. Student's perception of doctoral study when first enrolled

To determine if any differences between academic departments within the College of Human Resources and Education may have contributed to the completion or noncompletion of the EdD, the following variables were considered:

1. Relationship the student experienced with the faculty of his/her department during doctoral study

2. Relationship the student experienced with other students in his/her department during doctoral study

3. Relationship the student experienced with his/her doctoral committee during doctoral study

4. Relationship the student experienced with his/her faculty advisor during doctoral study

5. Relationship the student experienced with the chair of his/her doctoral committee

6. Student's perception of the quality and value of course work

7. Orientation the student received relative to the academic requirements of the department

8. Orientation the student received relative to doctoral study in general

Significance of the Problem

The 1980s ushered in a period of great economic decline, particularly in West Virginia, where insitutions of higher learning were already greatly underfunded in comparison to similar institutions in other states. The utilization of meager financial resources became an issue of paramount importance. Beginning in 1981, West Virginia University conducted several internal studies, utilizing outstanding consultants from throughout the United States. The results of these studies formed the basis for making decisions to modify programs and organizational structures, so that scant financial resources could be maximized. The problem of attrition from doctoral programs, while consuming many resources at West Virginia University, received very little attention in these studies.

During the fall of 1984, discussions were held with the Assistant Vice-President for Graduate Studies and Research at West Virginia University, the Associate Dean for Graduate Studies and Research in the College of Human Resources and Education, the Associate Director of Institutional Research, and a systems analyst from the Office of Admissions and Records. It was discovered that there were no data available to indicate the number of students who: (a) had permanently withdrawn from doctoral programs; (b) had temporarily discontinued their doctoral studies; or (c) may never have been enrolled as a doctoral student, although they had been coded as such on admission and records data.

According to information from Admissions and Records, the College of Human Resources and Education is a very significant part of doctoral education at West Virginia University, enrolling 1,235 of the 2,136 total doctoral students registered in 1984. The Assistant Vice-President for Graduate Studies and Research and the Associate Dean of Human Resources and Education, while estimating the attrition from doctoral programs as high as 60% within the college, had no statistical data on which to determine why students do or do not complete EdD degrees.

While there have been a few national studies conducted on attrition from doctoral programs, they have excluded West Virginia University. Some dissertations have been written on studies conducted within specific institutions. None of the institutions studied,

however, have been similar to West Virginia University in location or type of student population (i.e., rural Appalachia).

Therefore, a study of this nature is important because: (a) the College of Human Resources and Education, while enrolling over 50% of the total doctoral student population at West Virginia University, has an estimated 60% attrition rate from its doctoral programs; (b) accurate demographic and "head count" data on doctoral students are not available; (c) statistical data on why students do or do not complete the EdD are not available; (d) other studies have not included students similar to those at West Virginia University; and (e) West Virginia University must utilize resources to the fullest extent.

This study will be of value, in a very practical sense, to those responsible for establishing policies and procedures and planning programs. The findings from this study will: (a) give direction to possible supplementary processes to be used in the selection of doctoral applicants; (b) provide additional insight into doctoral attrition and thus suggest modifications in the structure of doctoral programs; (c) help faculty members and administrators become better prepared to advise and counsel doctoral students; (d) contribute to a better understanding of values, commitments, and backgrounds of doctoral students; and (e) provide faculty and staff with a perspective from which future evaluations of degree requirements and programs can be made.

Limitations of the Study

The limitations of this study were:

1. The study surveyed those students who received an EdD degree from the College of Human Resources and Education at West Virginia University between August 1977 and August 1984. These students were also residents of the United States whose addresses were available during the spring of 1985.

2. Students were surveyed who: (a) had not received the EdD degree; and (b) were enrolled in the College of Human Resources and Education as doctoral students; and (c) had not taken course work at West Virginia University during the 1983 calendar year; and (d) had addresses available during the spring of 1985; and (e) currently resided in the United States.

3. Those EdD students who were enrolled in classes during the 1984 academic year were not surveyed.

4. The questionnaire was limited to selected psychological, sociological, and economic characteristics.

5. The information supplied by the Office of Admissions and Records at West Virginia University was not 100% accurate. Errors were found in names, addresses, last date of enrollment in classes at West Virginia University, and the coding of individuals as doctoral students.

6. The findings from this study can be generalized to other colleges within West Virginia University and to other institutions similar to West Virginia University in location or type of student population.

Definition of Terms

For the purposes of this study, certain terms were defined as follows:

1. Doctoral Recipients, Graduates, Recipients of the EdD, Successful Student, Recipients. These terms are used interchangeably to identify those individuals who have successfully completed all doctoral requirements and have been awarded the EdD degree.

2. Nongraduates, Unsuccessful Students, Inactive Students, Stopouts, Nonrecipients. These terms are used interchangeably to refer to those individuals who have been admitted as doctoral students, according to the Office of Admissions and Records, but have not been enrolled in any classes during the 1983 calendar year, and have not received the EdD.

3. Dropout. A student who terminated the doctoral program, either voluntarily or involuntarily, prior to receiving the degree, and who had no intentions of resuming doctoral study in the same field in the future at West Virginia University.

4. Attrition. Permanent or temporary withdrawal from the doctoral program prior to receiving the degree.

5. ABD. A doctoral student who had completed all of the requirements for the EdD with the exception of the dissertation. At West Virginia University this meant the student had successfully completed the comprehensive exams and had been given permission to begin preparing the dissertation prospectus.

Methodology

A questionnaire, specifically designed for this study, was mailed to 254 EdD recipients and 287 nongraduates. A response rate of 82.98% of the graduates and 63.40% of the nongraduates was received. A total of 31 null hypotheses were tested. In addition, the Education Administration and Curriculum and Instruction Departments were compared for significant differences on eight of the hypotheses. After computer tabulation, chi-square and *t* test statistical procedures were utilized to test for significant differences at the .05 level.

Organization of the Remainder of Study

The review of literature relevant to the variables that will be analyzed in this study is presented in Chapter II. The research procedures utilized in this study and the methods used to analyze the data are described in Chapter III. In Chapter IV, the findings of this research are presented. A discussion of the results, the conclusions, and the recommendations suggested by the results are included in Chapter V. A copy of the questionnaires, cover letter, and post card used in this study are contained in the Appendices. The sources used in writing this report are listed in the References.

CHAPTER II

REVIEW OF LITERATURE

A review of related literature was conducted in order to: (a) identify specific variables related to attrition from doctoral programs that had been addressed in previous studies; (b) determine if any variables related to doctoral attrition needed additional study; (c) determine if there were areas of doctoral attrition that had not been addressed at all in previous studies; and (d) gain a broader base of knowledge from which to design this study.

A review of the attrition studies on the graduate level, as identified by such key words as graduates and nongraduates, persistors and nonpersistors, successful and unsuccessful, degree recipients and nonrecipients, graduate students and dropouts, doctoral degrees, doctoral programs, doctoral dissertations, doctoral students, college students, attrition, universities, and student personnel services, revealed that a great deal had been written about a broad spectrum of current problems in graduate education. In the specific area of attrition, both manual and computer assisted searches revealed a considerable number of studies on the master's level, and even more on the undergraduate level. Relatively few studies, however, focused specifically on variables related to attrition at the doctoral level, and from these studies conflicting and inconclusive findings were often reported.

Some of the variables selected for this study have received a great deal of attention in the literature, while others have not been researched to any great extent. The discussion which follows divides several major factors of attrition into separate categories. These categories often interrelate, however, as most studies indicated that attrition was usually the result of the interplay of two or more factors rather than a single one. Quarles (1949) pointed out:

> The investigator who seeks to ascertain the causes of withdrawal in individual cases will find that in most instances the unlocking key will be a combination of factors rather than a single factor. The reasons for a student's withdrawing are complex and reveal a pattern of dissatisfaction rather than a single predominant cause. Indeed, even the instances where poor grades are given as the reason, it is well to realize that in a student's academic performance there is an interrelatedness of factors, a student's scholastic achievement being a result of the combined influence of a great many behavioral influences which, themselves, are intricately interwoven. (p. 406)

Expressing a similar viewpoint Summerskill (1962) stated:

> Seldom does a single factor cause a student to discontinue his studies. Although a student might be highly motivated to attain success in his studies, the interplay of other circumstances could make his continued involvement with school impossible, at least temporarily. (p. 642)

The variables given emphasis in this study are discussed in this chapter in the following order:

1. Sex
2. Race
3. Marital status
4. Number of children
5. Age
6. Educational level of parents and immediate family

7. Place of residence during formative years
8. Personal support from family and spouse
9. Full-time versus part-time study
10. Distance from the university
11. Physical and emotional health
12. Time period in which major field was chosen and commitment to that field as a career
13. Motivation and reasons for beginning doctoral study
14. Finances
15. Student interaction with faculty and faculty advisor
16. Student interaction with other students
17. Relationship with doctoral committee
18. Relationship with doctoral committee chair
19. The value and quality of course work
20. Orientation to doctoral study and the institution
21. Difficulty incurred with the dissertation
22. Perception of the value of the doctorate
23. Perception of doctoral study

Sex

Roark (1977) reported that the enrollment of women in graduate and professional schools increased 75% between 1970 and 1975, but men's enrollment increased only 23%. As a result of the continuation of this trend, women represent nearly half of the graduate and professional school students in the first year of a degree program. However, Roark also reported that attrition caused the proportion of

women to drop to 33% for the second, third, and fourth years of education. Similarly, McCanne, McCanne, and Keating (1980), found that the attrition rate for women increased as the level of formal education increased.

A report from the National Research Council (1983) confirmed the findings of Roark and McCanne et al. (1980). Although the number of women receiving the doctorate reached an all-time high of 10,485 in 1983, they represented just 34% of total doctorate recipients. The report also indicated the number of males receiving doctorates has decreased since the peak years in the early 1970s.

Education, accounting for over one third of 1983 female doctorate recipients, continues to be the most populous field for women. A dramatic change in gender proportions occurred in education in 1983 when the number of women exceeded the number of men for the first time (National Research Council, 1983).

There are a variety of factors, unique to women, that cause attrition from doctoral programs. Sells (1973) maintained that being a woman has been the greatest liability and/or predictor for determining dropout status. For women, graduate study often poses problems that are different from those encountered at the undergraduate level. Furniss and Graham (1974) stated:

> The typical age for women in graduate school is also the age when society makes its greatest demands for traditional role behavior. Women between 22 and 30 both expect and are expected to be wives whose husbands are establishing their own careers and also to be mothers of preschool children. This traditional role frequently conflicts with the student and scholar role. (p. 37)

Some researchers have found marital status to be a factor in attrition of females. McCoy (1976) discovered the attrition rate for married females was significantly higher than for single females. Some female students are successful in combining graduate education and family responsibilities while others appear to resolve the conflict by either discontinuing the educational pursuit or terminating the marital relationship (Centra, 1974).

Studies by Feldman (1974), Katz and Hartnett (1976), Roby (1972), Solomon (1976), and Tittle and Denker (1980) indicated that there is a great deal of inequality based on sex at the graduate level. But this is not surprising since historically inequalities have existed between men and women in higher education. For example, Feldman (1974) stated:

> Women are different physiologically and tempermentally and are socialized differently than men. These differences handicap women when they attempt to compete with men. (p. 12)

Kjerulff and Blood (1973) found that females lacked the informal communication channels that are vital for a successful career. They also indicated that women graduate students tend on the average to do less research while in graduate school than their male peers, and are less likely to receive the PhD. In similar findings, Hite (1983) found that regardless of the field of study, males reported more role congruence and perceived more support from faculty members than did females. In addition, women students who do not have the benefit of faculty support are at a disadvantage in their studies and in subsequent searches for employment. While the literature reveals that

female doctoral students are less likely than their male counterparts to cultivate strategic collegial alliances, Hiebert (1982/1983) reported that this problem may be decreasing. She concluded that the increase in female doctoral students may allow students to participate as colleagues on the basis of their competence, rather than their sex.

Several studies have determined whether the sex of the student is a factor in attrition from doctoral programs. In some of the research (Berelson, 1960; Franklin, 1970/1971; Kerr, 1966/1967; Wright, 1964), when there were relatively fewer females pursuing doctorates, there were not enough female doctoral students in the samples on which to conduct statistical analysis.

Studies conducted by Bundy (1968), Hassan-Shahriari (1983), Phillips (1968), and Renetzky (1966/1967) found no statistical difference in the relationship of males and females to the completion or noncompletion of the doctorate. Contrary to these findings, however, at least three researchers, Boozer (1972), Decker (1973), and Mooney (1968), found sex to be a statistically significant factor in the completion of doctorates, with males having a higher completion rate than females.

Dolph (1983/1984) did not statistically test the variable of sex in his study at Georgia State University. He did find, however, that the attrition rate for males was 47% and for females it was 43%. At least three studies (Adler, 1976; Bisconti, 1978; Fischer & Peters, 1979) reported conflicting findings. While they did not statistical-

ly test the variable of sex relative to attrition, they all found that the attrition rate for female doctoral candidates was much higher than for males.

Race

Although there is a great deal of information in the literature about minorities and foreign students in general, Tinto (1975) maintained that there was a dearth of information in the area of attrition rates of minorities. Tinto stated:

> It is clear that race is an independent predictor of dropout (independent of both ability and social status) but it is unclear in which ways this aggregate relationship occurs. We simply do not know enough about the process of interaction that leads individuals of different racial backgrounds to drop out from higher education. (p. 101)

Of all of the research conducted on attrition from doctoral programs, only four studies reported any information about minorities. Koolboon's (1984/1985) study of doctoral students enrolled in selected education departments in the United States reported that foreign students perceived more difficulties with doctoral study than Americans. Foreign students have more difficulties in collecting data, receiving adequate library services, and financing their dissertations.

Caucasians represented 97% of Tucker's (1964) national sample as compared to only 1% black and 1% "other" nationalities. Blacks had the highest attrition rate, 65%, across all academic fields and types of institutions. Caucasians represented an attrition rate of 36%; the other nationalities had an attrition rate of 26%.

In a study of doctoral attrition in the Multicultural Program at the University of San Francisco, Artiga (1983/1984) found approximately 33% Caucasians and 66% minorities in the dropout group. Minorities in this study represented nine ethnic groups under the main categories of Hispanic, Asian, and black.

In conflicting findings, Hassan-Shahriari (1983) found a statistically significant difference in completion and noncompletion of the EdD and the race of the student. In her study, however, more minorities than Caucasians completed the degree.

Marital Status

While the variable of marital status has received considerable attention in studies of attrition, the findings have been contradictory and inconclusive. From a descriptive viewpoint, the majority of doctoral students are married at some time during doctoral study. Lemley (1976) found that 82% of inactive doctoral candidates at the University of Mississippi were married at the time they were admitted to doctoral study; Bartels (1962/1963) found that 96% of the nongraduates and 90.2% of the graduates were married at the time of the qualifying exams.

On a national basis, Tucker (1964) found attrition to be the highest among those students who were separated from their spouses during the period of their doctoral program and lowest among those who got married after the beginning of their doctoral study. Only 30% of all respondents were single during the entire period of doctoral study and 46% were married during the entire time.

Studies conducted by Dolph (1983/1984), Franklin (1970/1971), and Hassan-Shahriari (1983) found no statistically significant difference in the marital status of those doctoral students who did or did not complete their degrees. Boozer (1972), Feick (1969/1970), and Reeble (1975/1976), however, found that a statistically significant percentage of successful students were married during the entire period of doctoral study. Similarly, Chilman and Meyer (1966) found that very small percentages of married men and women students had left college at any time because of marrying. In opposite findings, Bayer (1972) reported the attrition rate for married students was higher than that of single students.

Both Phillips (1968) and Renetzky (1966/1967) conducted tests of statistical significance on the variable of divorce. In conflicting findings, Renetzky discovered that divorce was a factor in the non-completion of a doctorate, while Phillips reported that a higher number of successful students were divorced.

When viewing high drop-out rates among female students, many authors point to role conflicts and family responsibilities as causal factors. Astin (1976) reported that marriage and family obligations were more likely to interrupt the graduate studies of female students than of their male counterparts. Feldman (1974) found that women who attempted to combine two full-time, time-consuming roles of student and spouse encountered problems. Some students endeavored to resolve this conflict by abandoning one of the roles, either through divorce, or by placing less emphasis on the student role by becoming part-time students.

Mooney (1968), however, discovered conflicting results. He found no discernible relationship between female graduate students' marital status and receipt of the doctorate six to eight years after entering. The graduation rates of married and single women were remarkably similar. The study did not substantiate the belief that women who marry while in or before entering graduate school are likely to drop out to care for their children or to change locations due to their husbands' jobs. However, marital status did positively affect men's completion rates. Thus, marriage and completion of the doctorate were positively related for men and unrelated for women.

Number of Children

The effects of children on student marriages is an important area of study since a large number of married students have children (Aller, 1963; Graff & Horne, 1973), and because children are seen as having a potentially negative effect on marital adjustment (Chu & Bergsma, 1978; Feldman, 1971; Luckey & Bain, 1970; Russell, 1974; Ryder, 1973). The added responsibilities of parenting is an important concern among married students (Gottlieb, 1981). Children also represent one of the main reasons wives do not return to school (Schlundt, 1962) and why full-time students participate in student activities less frequently than desired (Eshleman, 1967).

Giles (1982/1983), as a result of gathering information for her doctoral dissertation through in-depth interviews, came to different conclusions. She could not find that children adversely affected one's academic performance or continuation in the doctoral program.

In fact, she found that the couple whose child is born subsequent to enrollment exhibits an appreciable change in its attitude about the compatibility of school and children. She did not discover any adverse effects of having a child while in school, and in some instances the couple was more motivated to complete the program. The presence of a child provided some couples with a tangible reason to continue with studies and to receive the degree as soon as possible. In similar findings, Hall (1984/1985) found that the anxiety level of doctoral students became lower as the number of children increased.

Three studies (Boozer, 1972; Phillips, 1968; Wetherill, 1959/1960) that utilized statistical methods to determine if the number of children a doctoral student had influenced the completion or noncompletion of the degree, reported that this was a significant variable. Phillips and Wetherill concluded that the unsuccessful group had more children. Boozer, however, concluded that the successful group had more children. In conflicting findings, neither Dolph (1983/1984) nor Hassan-Shahriari (1983) found the number of children of doctoral students to be a statistically significant variable related to completion or noncompletion of the degree.

Other studies that collected information on this variable, but did not apply statistical procedures, reported equally contradictory findings. Bartels (1962/1963), Tucker (1964), and Wright (1964) concluded that the unsuccessful group had more children, whereas Feick (1969/1970), Franklin (1970/1971), and Reeble (1975/1976) found successful doctoral recipients had a greater number of children.

Age

Studies that have looked at the relationship between the age of the student and the rate of attrition have reported very different findings. For example, in his study of 189 graduate students Wright (1964) indicated:

> The most noteworthy finding is that age seems clearly and inversely related to success. Although most of the students were between 22 and 30 years of age, the few who were younger were more likely to succeed on both the master's and doctoral level, and the few older students did less well. Similar relations between age and success have been reported by other researchers, but as yet the reasons for greater success among younger students remain unknown. (p. 96)

In a study comparing individuals who had and had not been admitted to the Doctoral Program in Education Administration at the University of Minnesota, Hill (1968/1969) discovered that the individuals who had been accepted were younger and had a stronger commitment toward completion of the doctorate than those who were not accepted. Similarly, when statistical tests of significance were applied to the studies conducted by Renetzky (1966/1967) and Wetherill (1959/1960), they both found that the successful doctoral students were under 30 years of age upon entering a doctoral program.

Summerskill (1962), on the other hand, found that "the general conclusion to be drawn from the literature is that age per se does not affect attrition although older graduates may encounter more obstacles to graduation" (p. 631). Studies conducted by Bartels (1962/1963), Feick (1969/1970), Franklin (1970/1971), Hassan-Shahriari (1983), and Phillips (1968) supported Summerskill's conclusions. Although the mean ages of the unsuccessful students at the

beginning of their doctoral programs were higher than the mean ages of the successful students in these four studies, no statistical differences were reported.

Two studies reported advantages of older doctoral students. Papa-Lewis (1983/1984), in her study on mentoring relationships, found that respondents who were between the ages of 45 and 69 were significantly higher on befriending their advisor/mentor than those aged 20 to 44 years old. In addition, Hall (1984/1985) found older doctoral students to have lower anxiety levels than younger ones.

Educational Level of Parents and Immediate Family

Coleman (1966) gave evidence that parents' background, as measured by their education and/or occupation, was positively related to scholastic performance and achievement. With concuring beliefs, Berlson (1960) reported that students who enroll in doctoral programs are influenced, in part, by a home environment of better educated parents and by parents who can afford a more costly level of education.

Evidence abounds that social skills are important to persistence in college. These skills enable the person to locate, interact with, and use resources (e.g., students, faculty, and staff) available to students within the institution. The absence of social skills, especially among the disadvantaged segment of the student body, appears particularly important in the failure of students to maintain adequate levels of academic performance in college (Tinto, 1982).

Of the students responding to Tucker's national study in 1964, 40% of their fathers had some college education, 13% had master's or professional degrees, and an additional 4% had earned a doctorate. This study reported that generally speaking, attrition was lower, from 25% to 35%, among respondents who came from homes where the father's education consisted of at least a bachelor's degree than among respondents whose fathers' education ranged from nongraduation to some college education, 36% to 38%. The attrition rate was lowest, 25%, for respondents whose fathers received the doctorate.

Similarly, Kirkpatrick and deFleur (1960) found that college and university professors were "big producers" of PhD recipients. They reported that over one third of the children of the college and university professors in their sample had PhD degrees. Moreover, Western (1964/1965) found that nearly one half of the PhD students at Columbia were from upper-middle or upper-class homes, and Renetzky (1966/1967) found dropouts to be from a lower socioeconomic status than graduates.

Mooney's (1968) study of Woodrow Wilson Fellows indicated the opposite was true. For example, 36% of the Fellows whose fathers dropped out of high school received the PhD, whereas only 30% of those Fellows whose fathers held a master's degree had acquired the doctorate. Regarding the mother's education, Mooney found that 35% of the Fellows whose mothers had dropped out of high school had acquired a doctorate, while 36% of the Fellows whose mothers had master's degrees had acquired a doctorate.

Only one study dealt with the educational level of siblings in the family. Franklin (1970/1971) reported no statistically significant relationship between completion of the doctoral program and the number of brothers and sisters doctoral students had or the parents' occupation upon graduation from high school.

Place of Residence During Formative Years

There is very little statistical data available on how the geographical location in which a person is reared affects completion or noncompletion of the doctorate. Summerskill (1962) noted that studies have shown attrition to be higher among students from rural areas and students from out-of-state. He suggested that there are differences in the quality and curriculum of schools in cities and towns and social and cultural differences between rural and urban regions.

Tucker (1964), on the other hand, found that attrition was the lowest, 33%, among doctoral students who came from farms and small towns. For those who came from more populous communities, attrition rates ranged from 35% to 41%. Attrition was higer among those individuals, however, who attributed great importance to factors such as "not wanting to cut home ties" as reasons for selecting institutions of higher learning.

Tucker's (1964) findings support what other authors believe about the Appalachian culture. Every culture has its distinctive attributes, emphasis, and values, and the Appalachian mountain region is no exception. There are many inherent factors in the value sys-

tems of Appalachian residents that influence the pursuit of higher education. The primary influence on whether an individual will pursue postsecondary education is the family unit. The strength of the Appalachian culture lies within family and "kin" group relationships in which attitudes, patterns of behavior, outlook on life, and ways of dealing with everyday problems are learned and tend to be very similar generation after generation. The family structure also instills personal ties, identity, and loyalty among family members. Appalachian people never really cut their ties to their place of origin, and if forced to live elsewhere, try to return as often as possible to the old homeplace (Crickard, 1975).

Kaplan (1971) related that adults in various parts of Appalachia view education differently. For example, people living in more urbanized areas see the value of education. However, people in the more rural sections have a history of indifference and even contempt for educational values. Many young people find themselves caught in a personal struggle of values. Teens are often encouraged to complete high school by teachers, but receive very little support from parents who do not see the value of education. Young people may acknowledge that education is important in today's society, but really believe that it is unimportant. Therefore, many lack any aspiration to pursue any type of postsecondary education.

Those individuals who do choose to obtain a higher level of education, often are very sincere in wanting a better career, but lack the support, role models, and knowledge to assess clear goals or

alternatives. Young people experience another tremendous conflict of values when they realize that once they receive an education they will probably have to leave their homeplace because jobs will not be available in their hometown or surrounding areas (Kaplan, 1971).

Personal Support from Family and Spouse

Social support systems help to moderate stress, and those doctoral students who have access to supportive persons during stressful encounters are less severely affected by stress than those who are socially isolated (Gottlieb, 1978). When an individual is in need of help, he or she often utilizes informal resources which develop out of mobilizing family and friends. Relatives are seen as primary sources of aid during crises, even in the impersonal, disorganized, and fragmented urban community. They exist as a "semipermanent structure" among all cultures and classes, are important for social order and integration, and are one of the most important links between a person and his or her environment. Friendship and kinship ties are extremely important (Collins & Pancoast, 1976).

Sussman and Burchinall (1962) viewed the kin family network as an essential structure in family functioning. After marriage many couples continue to be involved in a network of mutual assistance with their families, especially with parents. Greenberg and DeCoster (1976) found that married student couples show a preference for relying on friends, faculty, and relatives for help with problems rather than utilize campus counseling resources. Gilbert (1982) cautioned that the frustrations resulting from social isolation that graduate

students experience may strengthen family ties, but may also lead to isolation or loneliness within the family.

Giles (1982/1983) found that married doctoral students identified their spouse, and parents and/or parents-in-law as two major sources of support. These people were seen as being the primary sources of support and, in most cases, the only sources of support. The types of support they provided were financial, emotional/psychological, academic, and basic needs. This support was offered in various forms and at different times, but they all served a major function in helping to reduce life stresses for the student and spouse. Giles further believed that parents and family also play an important role in meeting social needs and in providing support and opportunities for social interaction. They may serve as a social outlet or as intimate friends.

Support from the student's husband or wife is the major source of support, without which the student would likely not be able to pursue doctoral study. The student views support from the spouse as the sole factor which makes doctoral study tolerable, meaningful, and enjoyable (Giles, 1982/1983). Westwood (1982/1983) found that both husbands and wives considered themselves very supportive of their student spouses. Conversely, the students perceived their spouses as being very supportive.

In two statistical studies, Phillips (1968) concluded that family encouragement and support were a nonintellective correlate with the completion of the doctorate and the lack of family support

correlated with noncompletion. Likewise, Renetzky (1966/1967) found that nongraduates perceived less support from their families and spouses than graduates.

Encouragement from teachers, employers, parents, relations, and friends seemed to have the least influence on the decision of individuals to pursue doctorates (Tucker, 1964). Of this group of people, however, teachers and employers had less influence than parents, relatives and friends.

Full-Time Versus Part-Time Study

Residency requirements have been controversial for many years. Some professionals believe that graduate study cannot be carried on in a situation where the student is constantly torn between the demands of his or her employment and the graduate program. Others insist that if a graduate student can simultaneously be employed and successfully meet the rigors of graduate study, the student is stronger for it (American Association of School Administrators, 1963).

Some researchers think that traditional residency requirements are unrealistic, unaffordable, and unnecessary in today's modern environment. Lilley (1978) contended that we must develop better delivery systems for the doctorate:

> The strict, traditional residency requirement is unrealistic for the vast majority of doctoral potentials. The tremendous advancements in technology and alternative delivery systems reduce previous needs for residency. "Off-campus" programs can easily duplicate campus based programs through the use of television, computers, and traveling professors. (p. 16)

In support of modifying residency requirements, Lemley (1976) reported that over one half of the respondents in her follow-up study of nongraduates indicated the residency requirement was the greatest obstacle within the doctoral program to the completion of their degrees.

Those who support the notion of full-time residence cite the importance and use of library facilities, dialogue between professors and students, interchanges between other students, freedom from distractions, expanded programs, and the opportunities to participate in research as important advantages (Faber, 1978). Papa-Lewis (1983/1984) found supporting evidence for full-time study. She reports that full-time advisees were significantly higher on building trust with their faculty mentor than the part-time advisees.

Several studies at individual institutions addressed the issue of full-time versus part-time study. Bartels (1962/1963), Dolph (1983/1984), Phillips (1968), Reeble (1975/1976), Renetzky (1966/1967), and Tierce (1984/1985) all found that full-time study was a positive factor related to degree completion. In each of these studies a considerably higher percentage of doctoral recipients spent more time in residence and more semesters in full-time study while in pursuit of the doctorate than did the nongraduates. Based on these findings Phillips stated:

> The early establishment of full-time student residency was a good indication of the strength of students' desire to earn the doctorate. This act demonstrated their acceptance of doctoral work as requiring their full-time effort. It further denoted family support and sound financial planning. The establishment of full-time student status made it more difficult for them to

> withdraw from the University had they become discouraged by problems, demands, or needs. (p. 110)

Franklin (1970/1971), however, found the opposite to be statistically significant. With his population of students, he found no significant relationship between attrition and success and whether the doctoral program was completed on a full-time or part-time basis.

The employment of doctoral students, whether by choice or necessity, impacts the amount of time students can devote to full-time study. Although three studies were found that dealt with the variable of employment, a limited amount of information has been reported. Hassan-Shahriari (1983) found that employment was not a statistically significant factor in attrition while students were working on their dissertations. Wilson (1965), however, found doctoral recipients were concerned about having to write the dissertation while working full-time. Successful students more frequently reported some form of employment while at Emory University than unsuccessful students, but were less often hampered by it (Boozer, 1972).

Distance From the University

Only three studies reported findings relative to the distance the doctoral students lived from their repsective campus while pursuing the doctorate. A small but important number, 9.1%, of the non-graduates in Bartel's (1962/1963) study listed "not being in close proximity to the University" as the chief factor for discontinuing doctoral work. Although Franklin (1970/1971) found no significant difference between attrition and success in regard to distance lived

from the university during doctoral study, there were only four distances from which the respondents could choose. In addition, none of the distances, "0-5," "6-10," "11-20," and "21 or more" miles, were very far from the university.

In a study of the Multicultural Program at the University of San Francisco, Artiga (1983/1984) reported the difference in distance to the University may have been consequential to completion of the doctorate. Doctoral recipients reported an average distance to the University of 37.5 miles whereas the dropout group reported an average of 74.6 miles, a difference of 37.1 miles.

Physical and Emotional Health

Summerskill (1962) referred to those students who cited health reasons as factors in noncompletion of degrees as "a relatively small but significant fraction of the total dropout population" (p. 645-646). In reviewing 18 different studies, he found that an average of 8% of the dropouts listed medical reasons as causes of their attrition. Both Reeble (1975/1976) and Tucker (1964) found that only 4% of the unsuccessful students in their studies listed physical health as a very important reason for discontinuing the doctoral program.

Similarly, only 2% of the unsuccessful students in Renetzky's (1966/1967) study indicated that their psychological condition was either "fair" or "poor" at the time they completed the qualifying examinations. At the same time, however, 8% of the successful students rated themselves in these same two categories. In trying to explain these findings, Renetzky speculated that "the ABD's may be

considerably more reluctant to admit a 'psychological' inadequacy of any sort since this would directly reflect on their ability to complete the doctorate" (p. 201). Renetzky also reported that doctoral recipients experienced fewer critical, stressful periods than the dropouts although both groups saw a fairly high percentage of their ranks drop out at some point because of general discouragement.

Approximately one third of the graduate deans and faculty and half of the recent recipients of doctorates surveyed by Berelson (1960) considered the lack of physical and emotional stamina as an important reason for doctoral attrition. In similar findings, Phillips (1968) reported that 28% of the degree recipients felt that physical, social and psychological characteristics were the reasons that students did not complete the doctorate. In this same study, however, none of the nonrecipients felt that these characteristics were an important cause for their noncompletion. Likewise, at Emory University, Boozer (1972) found 12% of the successful students listed health as a primary obstacle while enrolled in doctoral study. General exhaustion from workload pressure and family complications were comments typical of the PhDs. Only 7% of the unsuccessful students gave health as their primary reason for leaving Emory. Their perception of health related more to personal, physical problems.

In similar findings, Wilson (1965) discovered that health problems had been a concern of doctoral recipients. Only two studies applied tests for statistical significance to this variable. Neither Franklin (1970/1971) nor Dolph (1983/1984) found any significant

difference between successful and unsuccessful groups as far as health status was concerned.

Time Period in Which Major Field Was Chosen and Commitment to That Field as a Career

Three studies collected data on variables related to when doctoral students chose their major field of study and the level of commitment the student had to the field. All three studies reported very similar findings. In Tucker's (1964) national study, he reported that attrition was lower among respondents who decided early (before or during high school) that they were going to enter PhD programs. The attrition rates ranged from 27% for those who "decided before or during high school" to 48% for those who "decided during graduate study." Attrition was lower among respondents who were "definitely committed to a specific field of study," 34%, as compared to those who "entered a doctoral program with the intentions of trying out the field," 46%. Tucker further indicated that attrition was higher among those students who had a different area of study for the doctorate from their bachelor's or master's level.

Feick (1969/1970) compared successful and unsuccessful EdD students at three Pennsylvania universities. He also found that timing of the decision by a graduate student to enter a doctoral program was a factor related to attrition. His evidence revealed that successful EdD recipients made their decision to enter doctoral study and selected their major field of study at an earlier age than unsuccessful students.

In a study of ABDs and EdDs at George Washington University, Hassan-Shahriari (1983) found that the attrition rate was slightly lower among respondents whose area of study at the doctoral level was the same as at the bachelor's or master's level and who were definitely committed to a specific field of study, than among respondents whose area of study at the doctoral level was different from that pursued at the bachelor's or master's level. She also found no significant relationship between ABDs and EdDs and their commitment to a career field. From the respondents in her study, 50% of the ABDs and 63.3% of the EdDs were definitely committed to the field of higher education with a preference for a specific type of job in that field.

Motivation and Reasons for Beginning Doctoral Study

Several studies have reported that motivational difficulties cause a large percentage of dropouts. Tucker's (1964) national study found that 31.9% of the respondents claimed "insufficient desire to get the degree" as a personal reason for dropping out. Berelson (1960) reported that, on a national level, 38% of graduate deans, 45% of graduate faculty, and 47% of recent doctoral recipients cited "lack of proper motivation" as the most important reason for attrition at the doctoral level. Summerskill (1962) stated:

> The largest number of dropouts involve motivational forces, goals, interests, and satisfactions relative to college and other facets of the student's life . . . We do not know what motivational forces are actually predictive of college success and we do not know how to accurately assess such motives in students. (p. 643)

Feick (1969/1970) reported that the difference between the successful and unsuccessful doctoral students seemed to be a matter of dedication or commitment to academic work, and the ability to overcome stresses. Poor motivation and immaturity were frequently given as reasons for attrition in a study of dropouts from Princeton (Pervin, Reik, & Dalrymple, 1966). Snyder (1971/1972) concluded that discontinuance of doctoral study is due to many reasons, an important one being the lack of personal commitment to complete the degree.

Berelson (1960), Davis (1962), Heiss (1970), and Tucker (1964) found that although students enter graduate school from a variety of backgrounds, they had similar motives. The primary motive for beginning doctoral study was to learn more about their fields of interest and to become competent in their discipline. Second in importance was the practical desire to improve their skills for a better job. Although general motives may be similar, Cartter (1967), Eckert and Neale (1965), Hall (1968), and Heard (1963) indicated that many students lack clarity of purpose in their graduate programs, particularly during the first year or two. Heard found that this uncertainty was related to discontinuties in the educational program.

DeSanctis (1970/1971) and Fellabaum (1982/1983) found that as many as half of the EdD recipients had changed career goals from the time they entered their doctoral programs until they completed the degree. In his study at Emory University, Boozer (1972) found that those who began Emory with clear goals had a better chance of finishing the PhD than those who did not. Dropouts seemed to have

particular difficulty recognizing the connection between their current progress toward their PhD and their future goals, while successful students were more convinced that the PhD degree was imperative for their future.

Tucker (1964) reported that 47% of the students in his study who indicated an "intrinsic interest in learning more about the subject matter of the field" as being the most important reason in their decision to do doctoral work were dropouts. Bartels (1962/1963) discovered the most important single factor influencing both successful and unsuccessful students to pursue the doctorate was "professional advancement." The "desire to teach in college" was the second most frequently rated item for both groups. Of equal importance to the graduates was "personal satisfaction," and for the nongraduates "desire for increased knowledge." Job mobility and advancement were the major reasons students entered the Doctoral Program in Education Administration at the University of Pittsburgh (Dickinson, 1983/1984).

Financial Reasons

The majority of research, conducted on both a national basis and within individual institutions, concludes that the lack of adequate financial support has a detrimental effect on the completion of doctoral degrees. Inadequate financial resources impact the completion or noncompletion of the doctorate in a variety of ways. At least one author maintains that the financial aspect of doctoral education begins with one's socioeconomic background. Walters (1965), in

Graduate Education Today, a report from the American Council on Education, reported that the average doctoral candidate comes from a less affluent socioeconomic group than a law or medical student, and since they often enter less lucrative professions, they are not as likely to assume loans and go into debt in order to continue or complete their degrees.

Two studies revealed that college faculty and administrators are cognizant of the impact of financial resources in graduate education. Graduate faculty, deans, and recent recipients of the doctorate were surveyed in a national study conducted by Berelson (1960). All three groups agreed that the lack of financial resources were important reasons for attrition. Likewise, in another national study conducted by The American Association of Colleges for Teacher Education (1960/1961), administrators of public and private institutions felt that personal finances and inadequate scholarships caused the greatest number of candidates to drop out.

While the lack of adequate finances may not be the only reason individuals terminate their doctoral studies, several authors agree it is an important contributing factor. Summerskill (1962) made several statements about the relationship of financial difficulty to college dropout rates and reported that it was a significant cause of attrition. In his review of existing findings on attrition he stated that "in 16 of 21 studies . . . finances were rated as one of the three most important factors in attrition" (pp. 646-647). Tucker's (1964) national study of doctoral students reported a definite

relationship between finances and attrition since "19% of the respondents marked lack of finances as the single most important personal reason for attrition, while 49% marked it as one of several reasons" (p. 259). Similarly, Boozer (1972) and Wetherill (1959/1960) found financial burdens were the second most important reason for discontinuing doctoral work. Renetzky (1966/1967) found that dropouts generally had more financial problems than graduates, and that while unsuccessful students had adequate finances, successful students had more than adequate finances.

Benkin (1984/1985), Dickinson (1983/1984), Grigg (1965), Hedges (1958/1959), Lemley (1976), Strom (1959/1973), Wilson (1965), and Wooster and Stover (1958) discovered financial problems were of great concern to doctoral students and a major reason for attrition from doctoral programs, at least temporarily, if not permanently. Financial problems also influence the duration of graduate study (Wilson, 1965). Inversely, Carmichael (1961) reported that the excessive time required to complete the entire doctoral degree process contributed to the shortage of finances experienced by many doctoral students.

Some researchers have focused specifically on how the availability of scholarships, fellowships, and assistantships affect attrition from doctoral programs. Those authors reported that the availability of these sources of financial assistance influences not only the attrition rate, but also initial enrollment figures of doctoral students and the amount of time students can spend in full-time study. In a study conducted at the University of Alabama, Phillips (1968) discovered that the lack of both financial assistance such as

scholarships, fellowships, or assistantships, and financial reserves such as spouses' job, savings, and loans correlated with the noncompletion of doctoral programs. Franklin (1970/1971) found that successful candidates in a doctoral program at Arizona State University usually had greater incomes than inactive candidates. The successful candidates also generally used scholarships, fellowships, assistantships, sabbaticals, loans, and teaching to support their doctoral studies, while inactive candidates used some other means of financial assistance.

Howard (1981/1982) and Plawecki (1974) found the availability of assistantships and fellowships to be the most important financial reason individuals entered doctoral programs and chose specific institutions. In similar findings at the University of Toledo Fellabaum (1982/1983) found a statistically significant relationship between full-time study and the availability of assistantships, fellowships, and other sources of financial aid. Those who studied full-time considered assistantships, fellowships, and low cost important reasons for selecting that university for doctoral study. Part-time students, however, did not find this factor to be important.

Most problems identified and ranked highly by married students are financial in nature (DeLisle, 1965; Graff & Horne, 1973; Greenberg & DeCoster, 1976; Gruver & Labadie, 1977; Kahn & Sharpley, 1980). Married students have higher expenses than single students and often must borrow money, become employed, or have the spouse become employed. Often their major source of income is their own

employment (Marshall & King, 1966) and/or the employment of the non-student spouse (Giles, 1982/1983).

Some researchers report slightly different findings and philosophies. Wright's (1964) position was that "financial well-being is a relative matter" and reported that 47% of the doctoral students in his study who were "financially comfortable" completed their degrees, "but so did 41% of the others."

Dolph (1983/1984) found no statistically significant difference between successful and nonsuccessful doctoral students and their levels of financial subsistence. He discovered that 51.2% of the unsuccessful students and 53.2% of the successful students at Georgia State University felt that they had more than adequate finances. There was a statistically significant difference between the successful and nonsuccessful students, however, in the number of scholarships, assistantships and fellowships that were received. In the successful group, 31.3% of the student received a scholarship, assistantship or fellowship, whereas only 17.9% of the unsuccessful group received this aid. Renetsky's (1966/1967) study reported similar findings. He found that unsuccessful students had adequate finances, but successful students had more than adequate finances.

Hassan-Shahriari (1983) found a significant relationship in completion or noncompletion of the EdD when students were forced to drop out, shift their field, or take part- or full-time employment during doctoral study as a result of financial pressures. At the dissertation stage, however, finances were not one of the most

important factors of attrition since most ABDs and EdDs were working full-time or were supported by their spouses.

Student Interaction With Faculty and Faculty Advisor

The topic of student interaction with faculty has been addressed in a relatively large number of articles, books, symposiums, and papers. Most researchers in the field concur that the relationships that are experienced between students and faculty members are some of the most important factors in the doctoral experience. The literature reveals that the quality of those relationships strongly influences the completion or noncompletion of doctorates.

Bargar and Mayo-Chamberlain (1983) placed great emphasis on the quality of graduate student-faculty relations. They reported that student-faculty interaction is an important source of encouragement and support at the doctoral level and that both personal and professional growth depend largely on a good student-faculty relationship. Further, they believed that advisors can contribute substantially to the creation of a positive environment for graduate students in the following ways:

1. through positive, nonverbal cues and overt expressions of interest in a student's work and welfare;
2. through open discussions of the developmental issues confronting student and advisor; and
3. through direct programmatic activities designed to create a developmental setting (p. 3).

In addition, Hartnett and Katz (1977) discovered:

> Graduate student relations with members of the faculty are regarded by most graduate students as the most important aspect

> of the quality of their graduate experience; unfortunately, many also report that it is the single most disappointing aspect of their graduate experience. (p. 647)

Gregg (1971) studied several factors affecting graduate student academic and nonacademic satisfaction. His conclusion, enumerated as follows, supports the preceding statement by Hartnett and Katz (1977):

> Regardless of which control variable was used, collegiality of faculty-student relationships was consistently found to be an effective predictor of both types of satisfaction. (p. 497)

Heiss (1970) discovered faculty-student relationships to be a major criticism of doctoral programs. She reported that doctoral students generally felt faculty failed to develop rapport with students, possessed little or no knowledge of their academic progress, and failed to provide support as well as constructive criticism. Similarly, Dickinson (1983/1984) found the lack of advisor support and interaction was major factor in attrition from doctoral programs at the University of Pittsburgh. Concuring with Heiss and Dickinson, Johnston (1961) discovered that doctoral graduates had received direct assistance from two or more advisors, whereas unsuccessful students had not. Further, Friendenberg and Roth (1954) felt student-faculty relationships often created difficulties for gifted students and caused them to leave degree programs before completion.

The literature suggests that graduates perceive their interactions with faculty more positively than nongraduates. Several studies conducted with EdD recipients were designed to evaluate doctoral programs at specific institutions. Graduates in studies

conducted by Behunin (1974/1975), Carter (1967), Christiansen (1975), DeSanctis (1970/1971), Fehr (1973/1974), Mayfield (1971), Plawecki (1974), Thompson (1970/1971), Williams (1971/1972), Wilson (1969/1970), and Yarnell (1965/1966) rated their interactions with faculty very positively. Further, many of the graduates indicated that interactions with faculty members and faculty advisors were major strengths of their respective programs and contributed to their professional development.

In similar findings, Fellabaum (1982/1983) reported that EdD graduates perceived faculty availability and interest in the student to be very important factors in their doctoral programs. Satisfaction with the doctoral program, particularly the dissertation experience, directly related to the advisee's satisfaction with his/her advisor, even though other persons offered professional assistance and/or personal support for dissertation writing (Daniels-Nelson, 1983/1984). Woody (1982/1983) recommended that the departmental faculty at the University of Wisconsin-Madison should determine how to develop a stronger support system to help reduce the number of potential ABD students.

Benkin (1984/1985), Boozer (1972), Feick (1969/1970), Hassan-Shahriari (1983), Phillips (1968), Renetzky (1966/1967), Tierce (1984/1985), Tucker (1964), and Wright (1964) all found evidence to suggest that student interaction with the faculty is a very important factor in the completion of doctoral degrees. Since these studies had a slightly different focus, the findings of each are briefly

presented here. Wright (1964) did not find statistically significant differences between successful and unsuccessful doctoral students on the following types of faculty interactions with students: conversations outside the classroom, conversations concerning personal matters, conversations concerning course work only, perceiving the faculty to be friendly, and perceiving the faculty to be casual. He did find, however, that more unsuccessful students than successful ones perceived the faculty as being indifferent or uninterested in them. Although it was not statistically significant, Renetzky (1966/1967) determined that the successful students had more interactions with the faculty outside the classroom and felt closer to a greater percentage of their department faculty than the unsuccessful students. Further, dropouts had less encouragement from their faculty advisors and basically deemed interaction with the faculty to be valueless.

Tucker (1964) stated:

> The attrition rate is higher among those who reported that they knew none or only a small proportion of the faculty well enough to visit them without an appointment than among those who indicated that they knew a large proportion of the faculty in their department. The attrition rate is higher among those who did not have sufficient opportunity to discuss their career plans with faculty than among those who did. (p. 202)

Another part of the Tucker survey asked students to rate the faculty, on a scale of 1 to 5, on seven different items. The faculty characteristic which was rated the lowest by all respondents was "sensitivity to student needs." Unsuccessful students rated their faculty lower on every item than did PhD recipients.

Phillips (1968) and Tierce (1984/1985) found a statistically significant difference between successful and unsuccessful doctoral students pertaining to several items related to student-faculty interactions and relationships. The successful students in the Phillips study rated the following items higher than the unsuccessful students: (a) liked the faculty, discussed ideas with them and were stimulated by them; (b) knew several faculty members well enough to "drop-in" on them without an appointment; (c) knew faculty members on an informal basis; and (d) had sufficient opportunity to discuss career plans formally or informally with members of the faculty. The Tierce study found that graduates, in comparison to nongraduates, placed a higher rating on the value and extent of student-faculty relationships.

Student-faculty interaction seemed to be a very important clue to the student's orientation to, and identification with, the value of graduate education at Emory University as reported by Boozer (1972). Boozer also believed that one or two encouraging and respected faculty contacts could offset the often "ego-smashing" and psychologically regressive nature of graduate study. Feick (1969/1970) stated:

> The greater the contact and interaction with the faculty, the greater the chances of obtaining the doctorate. The element of personal association is one that appears to contribute heavily to the total doctoral program. The majority of both groups replied that they desired faculty interaction and found it to be very useful. (pp. 116-117)

Contacts with professional persons in the program are seen as very important. If contacts are viewed as being more important to

one's career development than the acquisition of knowledge, there is a greater tendency for the course work to be perceived as a means to an end rather than as being conducive to developing one's professional competence. The student tends to see himself or herself as an apprentice who is undergoing present studies in order to gain the competencies necessary for a successful career (Giles, 1982/1983).

Mentoring relationships, an important aspect of student-faculty interactions, have received attention in the literature. Many researchers (Bolton, 1980; Burke, 1982; Burton, 1977; George & Kummerow, 1981; Henning & Jardim, 1977; Lunding, Clements, & Perkins, 1978; Moore & Sangaria, 1979; Schmidt & Wolfe, 1980) have defined the attributes and roles of mentors and have stressed their significance in the success of their proteges. Papa-Lewis (1983/1984), Spriesterbach and Henry (1976), and Utley (1967) concluded that mentoring relationships do exist between major advisors and their successful doctoral advisees. Papa-Lewis found that when advisees chose their major advisors, as opposed to being assigned, a greater level of friendship developed between the two. She also found that graduates trusted the faculty more than doctoral candidates. Fellabaum (1982/1983) reported that two important reasons EdD recipients chose the University of Toledo were the encouragement of a faculty member in the department and the good reputation of the department. Therefore, he found that faculty played a very important role in an individual's decision to attend the University of Toledo.

Baird (1969) and Gregg (1971) found that the collegiality of student-faculty and student-student relations were important to general satisfaction and sometimes to commitment toward a professional field. Female doctoral students are handicapped because of a lack of collegial relationships with faculty members (Kaplan, 1982).

Student Interaction With Other Students

Research has reported conflicting findings in the area of peer relationships in doctoral programs. The majority of authors, however, have stated evidence to support the notion that peer relationships are significant for the stress or support they add to the graduate school experience (Hite, 1985).

Wright (1964) found a statistically significant difference between groups in relation to student interaction. He reported that 55% of the successful students had other students as very close friends, whereas 67% of the unsuccessful group did not consider fellow students as friends. Tucker's (1964) findings concurred with Wright's study. Tucker stated:

> The attrition rate is substantially higher among those who reported that they avoided or were indifferent to the faculty or other graduate students than among those who liked, accepted and interacted with them. (p. 201)

Three authors compared peer interactions with other variables of doctoral study. Tierce (1984/1985) reported that graduates, as compared to nongraduates, at the University of Southern Mississippi placed a higher rating on the value and extent of student to student relationships. At Rutgers University DeSanctis (1970/1971) found

that graduates who studied full-time valued the interaction with other graduate students more than graduates who studied part-time. Hall's (1969) study on doctoral student peer interactions reported that students of moderate ability tended to depend on peer relationships more than did high achieving, self-confident students.

The gender of the student, some authors have found, affects the quality of peer relationships in doctoral programs. Hiebert (1982/1983) found the collegial quality of peer relationships was positively and significantly related to being a female doctoral student. Kjerulff and Blood (1973) reported a similar trend, finding that female students may substitute peer relationships to compensate for a lack of collegial sponsor relationships. Further, female graduate students experience stress and lack of motivation to continue their studies because of: (a) a lack of encouragement from male peers and faculty members; and (b) perceived negative attitudes of men toward women in graduate school. Male students also have negative, stereotyped expectations of their female counterparts in academic endeavors (Follett, Andberg, & Hendel, 1982).

In addition to the gender of the student, marital status also has an impact on peer relationships during doctoral study. School and family demands limit the contacts the married doctoral student has with other students (Greenberg & DeCoster, 1976) and leave little time for peer interaction (Lee, 1960). McCoy (1979) asserted that stress and time constraints for married students limit their opportunities for peer interaction. Giles (1982/1983) found that married

doctoral students did not usually know other married doctoral students. Association with other students was not likely to include those who were married, although there appeared to be no deliberate attempt to select single students as acquaintances. In fact, the married doctoral student indicated that he or she was interested in meeting other students undergoing similar experiences but found that such students and couples were not easily identifiable or were under similar severe time constraints.

Three studies did not find a statistically significant difference between successful and unsuccessful doctoral students and peer interactions. In a study of 265 former doctoral students at Georgia State University, Dolph (1983/1984) found no statistical difference between successful and unsuccessful doctoral recipients and their feelings of social isolation from other students. In this study about 30% of the unsuccessful students and 19.5% of the successful students felt socially isolated either "all" or "most" of the time. On the other hand, 74.2% of the successful students felt socially isolated only "occasionally" or "never" as compared to 61.9% of the unsuccessful students. Concuring with Dolph's findings, Phillips (1968) reported that 94% of the degree recipients and 79% of the nonrecipients had positive relationships with fellow students. He found no statistical difference between the two groups and their interactions with other students.

Renetzky (1966/1967) conducted a mail survey of 200 successful and unsuccessful doctoral students at the University of Southern

California. Following the mail survey he conducted personal interviews with 30 of the subjects. From the data gathered through the mail survey, he reported that 67% of both groups had either "a great deal" or "some" interaction with fellow graduate students. He found no great difference between groups in the "not very much" and the "hardly any" categories. After conducting the interviews, however, Renetzky documented several direct quotes from students which supported the qualitative importance of student interaction during doctoral programs.

Relationship With Doctoral Committee

The authors of the three studies that questioned doctoral students about their relationships with doctoral committees all concluded that doctoral committees are important variables in the completion of doctorates. Renetzky (1966/1967) found statistically significant differences between successful and unsuccessful groups on variables related to relationships between the student and faculty. The successful students perceived a greater degree of cooperation and availability from their dissertation committee than did the unsuccessful students. Another question in the Renetzky study asked students how frequently they attended social functions at which their advisor and/or committee members were in attendance. There was no significant difference between groups on their responses to this question.

A significant difference existed between successful and unsuccessful groups in Reeble's (1975/1976) study at the University of Missouri-Columbia on the variables of establishment of the doctoral

committee and willingness to select the same doctoral committee. Hassan-Shahriari (1983) also found a significant difference between ABDs and EdDs and their relationships with their doctoral committees. In general, EdDs rated their relationship with their doctoral committees higher than the ABDs on four characteristics: being active and accessible, interested in them as a person, reasonable to their ideas, and critical.

Relationship With Doctoral Committee Chair

In Challenges to Graduate Schools, Heiss (1970) stated that the ideal advisor was perceived as being a constructive counselor, a supportive colleague, and an understanding tutor, rather than a critic or a taskmaster. She stated that the quality and character of the relationship between the doctoral student and his advisor is unequivocally the most sensitive and crucial element in the doctoral experience in terms of immediate scholarly development. She also reported that the accessibility of the major professor was extremely important in determining whether a student completed the doctoral program.

Additional supporting evidence of the importance of the relationship with dissertation committee chairs can be found in studies conducted by Carter (1967), DeSanctis (1970/1971), Fehr (1973/1974), Fellabaum (1982/1983), Orso (1967/1968), Rush (1967), and Williams (1971/1972). In these studies, graduates from specific institutions felt their interaction with committee chairs was a major strength of

their respective programs and indicated that being advised and guided during the dissertation stage of the EdD was of greatest importance.

Students were asked to agree or disagree with certain statements characterizing doctoral study in Tucker's (1964) research. In all academic fields, Tucker reported that the majority of unsuccessful students agreed with the statement that they had received too little direct attention, supervision, and guidance on their dissertations. Hassan-Shahriari (1983) also found that neither ABDs nor EdDs felt that faculty advising, especially during the dissertation phase, had been adequate.

Reeble (1975/1976) determined that a significant difference existed between the successful and unsuccessful groups in terms of the following variables: (a) advisor influence on pursuit of the doctorate, (b) satisfaction with advisor, and (c) willingness to select the same advisor again. In a study at the University of Southern California, Renetzky (1966/1967) found statistically significant differences between graduates and nongraduates on several items on his questionnaire. More successful students than unsuccessful ones felt that they related "very well" or "well" to their advisors. Successful students felt a slightly greater degree of intimacy with and a considerably greater amount of cooperation from their advisors than did the unsuccessful students. He also found that the broader the base of interactional involvement between advisor and advisee, the greater the probability of success in the doctoral program. Many students in this study felt that very frequently the advisor may be

truly interested in his/her advisees, but does not have the necessary time to devote to them.

In a study conducted by Wetherill (1959/1960), 13% of the respondents indicated that an unsatisfactory relationship with their principal advisor at the University of Michigan was a "very important" reason for their discontinuance of doctoral studies. An additional 15% felt that this factor was of "some importance," while 66% felt it was of "little" or "no importance." When comparing three groups of Florida State University doctoral students, precandidates, candidates, and graduates, Howard (1981/1982) found a significant difference between the groups and their "interaction with their advisor/chairperson."

The Value and Quality of Course Work

Researchers who have reported results on variables related to the value and quality of course work have generally found that graduates perceive their course work more positively than unsuccessful students. Further, they have found that a negative perception of the value of the course work is one factor that influences decisions to drop out of programs.

Disappointment with the department program was the most frequently given reason for withdrawal from Emory; almost half of the unsuccessful students reported that reason (Boozer, 1972). The most common complaint was that the department was not oriented to the student's particular interests or area of specialization. The department was also the greatest cause of problems for graduates.

Their most frequent comments included inadequate teaching, courses, or guidance in their major area of interest. There were strong interrelationships in both samples between satisfaction with course offerings, level of instruction, and faculty attention. Moreover, one of the variables Howard (1981/1982) found to be significant between precandidates, candidates, and graduates in doctoral programs was "freedom and self-direction provided by doctoral course work."

One criticism of doctoral programs is that they are oriented toward conscientious plodders and tend to discourage some of the brightest and most imaginative students. Berelson (1960) discovered that about one fifth of recent doctorate recipients felt this was true. Heiss (1970) found an even higher percentage of doctoral students who believed that the best students drop out because the requirements are too constraining. The PhD recipients surveyed by Alciatore and Eckert (1968) strongly advised more breadth and flexibility in doctoral programs. Arrowsmith (1966), Hall (1968), and Heist (1968) reported that many highly motivated gradaute students become dissatisfied because their study is alienated from their lives and their work has little personal relevance.

Graduates' attitudes regarding quality, quantity, and utility of the Doctoral Program in Education Administration at the University of Madison-Wisconsin were more positive than those of current students (Woody, 1982/1983). Woody's findings are supported by a number of other studies that have been conducted in individual institutions to evaluate doctoral programs. Behunin (1974/1975), Carter (1967),

Christiansen (1975), Curtin (1976/1977), DeSanctis (1970/1971), Fehr (1973/1974), Plawecki (1974), Saylan (1983), Thompson (1970/1971), Williams (1971/1972), Wilson (1969/1970), and Yarnell (1965/1966) found that graduates most generally felt that while most courses were appropriate and useful, they were not all equal in value and many needed to be expanded, deleted, or revised. Further, the majority of the graduates in these studies felt that the programs of study should be more flexible and include more seminars, practical work experiences, field work, internships, practicums, simulations, and on-the-job training. In addition, the graduates suggested more creative teaching methods such as role-playing and in-basket simulations.

Only one researcher found that the quality of instruction had no relationship to the completion or noncompletion of the doctorate. Hassan-Shahriari (1983) found no significant relationship between ABDs and EdDs with regard to their decisions to attend George Washington University based on the quality of instruction they received in their doctoral programs.

Orientation to Doctoral Study and the Institution

There is a dearth of information in the literature concerning orientation programs for doctoral students. While a few authors support the value of providing orientation information to doctoral students, very little is known about the practices of institutions or the impact such programs have on retention of doctoral students. In a survey of reports on doctoral student problems, Melnick (1971) found need for appropriate graduate counseling and orientation programs.

Halleck (1976) supported the notion that orientation activities for graduate students should be no less comprehensive than those for freshman undergraduates, and that there should also be continued social activities available for graduate students at a level comparable to those available to undergraduates. In concurring thoughts, Heiss (1970) indicated that doctoral students evaluate their academic progress more positively if the orientation to their departments is more personalized and the opportunities exist for interaction with their professors.

One unpublished study by the West Virginia University Office of Institutional Research in 1982 did report that of 21 southern universities surveyed, 43% offered graduate orientation programs. Content areas commonly covered were graduate school policies, use of facilities, athletic programs, career development, and social events. Results of this study suggested that some institutions see the necessity of offering university wide orientation programs for graduate students (Wheeless, 1982).

Difficulty Incurred With the Dissertation

The doctoral dissertation is one of the important factors contributing to the noncompletion of doctorates. As many as 50% of the nongraduates at the University of Nebraska Teachers College indicated that completion of the dissertation was the greatest deterrent to completion of the degree (Bartels, 1962/1963). Further, 26% of the nongraduates felt that obtaining approval of the dissertation proposal was the major requirement to be overcome before completion

of the degree. The majority of nongraduates, 76.7%, indicated that some phase of the dissertation was considered to be a major problem in completion of the doctorate. Also, "fear of, or resistance to the writing requirements imposed by the dissertation" was the fourth most important reason for discontinuance of work toward the doctorate. In a study comparing foreign and American EdD students, Koolboon (1984/1985) concluded that many students lack the verbal skills to produce an acceptable draft of the dissertation. Moreover, Hassan-Shahriari (1983) reported that the self-image of the student was an important factor in his or her ability to complete the dissertation.

EdD recipients in Fellabaum's (1982/1983) study felt that a positive total dissertation experience was a very important aspect of completing the doctorate. With supportive evidence, Woody (1982/1983) found that graduates of the University of Wisconsin-Madison, in retrospect, felt positive toward writing the dissertation compared to the mixed feelings harbored by students actively engaged in the research project. Woody also suggested that ways should be developed to effectively orient the PhD candidate to the dissertation process in order to mitigate the anxiety and mystique that surround the program. Therefore, the doctoral dissertation should serve as the creative capstone for one of the graduate student's first endeavors in creative research. Yet studies (Feldman, 1974; Heiss, 1970; Riesman, 1976) concerning graduate students working on doctorates consistently report inadequate conditions for promoting creative endeavors.

Howard (1981/1982) reported two variables related to dissertations as being significant among his sample of precandidates, candidates, and graduates at Florida State University. "Dissertation topic selection" and "dissertation management" produced maximum separation among the respondent groups. On both of these variables, the graduate group reported significantly less difficulty than either the precandidate or candidate groups. The candidate group reported the greatest difficulty. Manual (1966) also discovered that difficulty in selecting a suitable dissertation topic was a major contributing factor in students failing to complete their doctoral degree.

In a study of off-campus doctoral students at the University of Southern California, Schultz (1983) found that lack of motivation was reported by 26% of the ABD students to be the most frequent obstacle encountered during the process of writing the dissertation. In regard to motivation, Renetzky (1966/1967) found that ABDs were less motivated if they had multiple changes in the dissertation topic or chose a topic later in their doctoral programs.

Perception of the Value of the Doctorate

The majority of the studies conclude that graduates, more so than nongraduates, perceived the value of the doctorate as being an investment for the future. Graduates, when compared with nongraduates, expected to receive more benefits, both material and nonmaterial, as a result of obtaining the doctorate. Of the 4,539 students who responded to Tucker's (1964) national survey, 57% felt that doctoral study was expensive but an excellent economic investment, 40%

felt it was a doubtful economic investment but nonmaterial rewards should compensate for it, and only 3% felt they would never be compensated for it. The attrition rate was lower among those who considered doctoral study as an excellent investment than among those who did not.

Bartels (1962/1963) found that a large majority of the nongraduates, 70%, felt that their professional objective would be hindered by the lack of a doctorate. Most of the nongraduates, 83.3%, felt that the doctorate would broaden their employment opportunities. Two thirds of this group also indicated that the doctorate would enable them to better serve their profession and enhance economic conditions for them. In addition, more than half, 53.3%, indicated that the doctorate would give them an elevation in position. Of all the respondents in this study, 96.6% felt that the time and money spent on study beyond the master's degree were justifiable.

In comparing precandidates, candidates, and graduates at Florida State University, Howard (1981/1982) found a significant difference among the three respondent groups on the variables of "income increases after participation in a doctoral program" and "employment related to the area of doctoral training." The graduates achieved the greatest income increase and more employment in their area of doctoral study as a result of completing their doctoral program, whereas the precandidates received the least amount of both. Renetzky (1966/1967) found dropouts viewed their doctoral studies as basically inappropriate to their career interests at the time of the survey.

In addition to a perceived increase in income, Feick (1969/1970) reported that an advance in rank and prestige are also involved in a desire to complete the doctorate. Orso (1967/1968) reported that graduates in his study found the degree to be considerably or extremely helpful in preparation for professional positions.

While the spouses of doctoral students may sometimes see themselves as having to make sacrifices in order for their husband/wife to complete the doctorate, they are more likely to view the support offered as constituting an important and essential contribution to an "investment" that will ensure a happy and more secure future for both of them. The investment of time, finances, and physical resources is made in order to help realize gains upon completion of the degree. Couples tend to allocate resources in expectation of future rewards. Both spouses also view their activities, goals, and other resources as being necessarily related to degree attainment. Because of this psychological investment in one's future, couples realize current pleasures must often be denied if they in any way interfere with one's educational goals (Giles, 1982/1983).

Only one study did not find a significant relationship between completion and noncompletion of the doctorate and the individual's perception of employment benefits. Hassan-Shahriari (1983) found no statistical difference in the completion or noncompletion of the dissertation and the perception the students had of future employment opportunities. Almost 70% of both ABDs and EdDs in that study viewed employment in both academic and nonacademic fields as either good or fair.

Perception of Doctoral Study

Boozer (1972), in his study at Emory University, reported that having a realistic view of graduate study did affect the likelihood that a student would complete the PhD degree. One out of five entering graduate students in his combined sample did not have a realistic view of graduate study, and students in the humanities or social sciences were most likely to have an unrealistic view.

Berelson (1960) and Davis (1964) have noted the large proportion of students who begin graduate study without a very clear idea of what to expect, or of what will be expected of them. In a study at the University of Southern Mississippi Tierce (1984/1985) reported that graduates had a higher degree of perceived stress associated with required examinations during their program than nongraduates.

So many students begin their study with an unrealistic view of graduate education that Gregg (1971) constructed a variable called the "expectation-reality discrepancy" in a study of graduate student satisfaction. This was the difference between what the student says he/she expected to encounter in graduate school when he/she entered, and what he/she perceives to be the reality which he/she has experienced. It was interesting to note his findings concerning differences in perception between males and females:

> . . . for females there is no correlation between either type of satisfaction (academic and nonacademic) and ERD, whereas for males the correlation, while not huge, is statistically significant at the .005 level. Thus, sex appears to have a considerable effect on the association between ERD and satisfaction. One possible explanation of this could be that females enter graduate school with less definite or clear-cut expectations for graduate school than do males, and, therefore, the impact would be less for females. (p. 498)

CHAPTER III

PROCEDURE AND RESEARCH DESIGN

The primary purpose of this study was to compare the relationship of psychological, sociological, and economic characteristics of doctoral students to the completion or noncompletion of the EdD degree. A secondary purpose was to determine if there were certain variables inherent to specific academic units which influenced the completion or noncompletion of the doctorate.

A review of the literature revealed that previous research on doctoral attrition has been inconclusive and often contradictory. There are certain variables, considered in some studies to be significant, and other variables that have not been addressed in any of the studies.

The variables selected for this study, based on the review of literature, were stated and answered through tests of null hypotheses. They were as follows:

Hypothesis 1.01. There is no significant relationship between the completion and noncompletion of the EdD and the sex of the student.

Hypothesis 1.02. There is no significant relationship between the completion and noncompletion of the EdD and the race of the student.

Hypothesis 1.03. There is no significant relationship between the completion and noncompletion of the EdD and the marital status of the student while working on the doctorate.

Hypothesis 1.04. There is no significant relationship between the completion and noncompletion of the EdD and the number of children the student had while working on the doctorate.

Hypothesis 1.05. There is no significant relationship between the completion and noncompletion of the EdD and the student's age when beginning the doctorate.

Hypothesis 1.06. There is no significant relationship between the completion and noncompletion of the EdD and the student's age when completing the doctorate.

Hypothesis 1.07. There is no significant relationship between the completion and noncompletion of the EdD and the number of people from the student's immediate family who have pursued postsecondary education.

Hypothesis 1.08. There is no significant relationship between the completion and noncompletion of the EdD and the educational level of the student's parents.

Hypothesis 1.09. There is no significant relationship between the completion and noncompletion of the EdD and the student's place of residence during the most formative years.

Hypothesis 1.10. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of personal support from individuals.

Hypothesis 1.11. There is no significant relationship between the completion and noncompletion of the EdD and the number of semesters spent by the student in full-time study during the doctorate.

Hypothesis 1.12. There is no significant relationship between the completion and noncompletion of the EdD and the student's place of residence during doctoral study.

Hypothesis 1.13. There is no significant relationship between the completion and noncompletion of the EdD and the physical health of the student during doctoral study.

Hypothesis 1.14. There is no significant relationship between the completion and noncompletion of the EdD and the emotional/psychological health of the student during doctoral study.

Hypothesis 1.15. There is no significant relationship between the completion and noncompletion of the EdD and the number of hours per week that the student was employed during doctoral study.

Hypothesis 1.16. There is no significant relationship between the completion and noncompletion of the EdD and the time period in which the student decided on his/her major field of study of the doctorate.

Hypothesis 1.17. There is no significant relationship between the completion and noncompletion of the EdD and the level of commitment to his/her career at the beginning of doctoral study.

Hypothesis 1.18. There is no significant relationship between the completion and noncompletion of the EdD and the student's motive for beginning doctoral study.

Hypothesis 1.19. There is no significant relationship between the completion and noncompletion of the EdD and the source of financial subsidy during doctoral study.

Hypothesis 1.20. There is no significant relationship between the completion and noncompletion of the EdD and the financial subsistence level during doctoral study.

Hypothesis 1.21. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with the faculty of his/her department during doctoral study.

Hypothesis 1.22. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with other students in his/her department during doctoral study.

Hypothesis 1.23. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with his/her doctoral committee during doctoral study.

Hypothesis 1.24. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with his/her faculty advisor during doctoral study.

Hypothesis 1.25. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with the chair of his/her doctoral committee.

Hypothesis 1.26. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of the quality and value of course work.

Hypothesis 1.27. There is no significant relationship between the completion and noncompletion of the EdD and the orientation the student received to the academic expectations of the department.

Hypothesis 1.28. There is no significant relationship between the completion and noncompletion of the EdD and the orientation the student received to graduate study in general.

Hypothesis 1.29. There is no significant relationship between the completion and noncompletion of the EdD and difficulty incurred with the dissertation.

Hypothesis 1.30. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of the value of the doctorate.

Hypothesis 1.31. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of doctoral study when first enrolled.

In order to determine if any differences between academic departments in the college may or may not contribute to the completion or noncompletion of the EdD, the following variables were stated, tested, and answered through tests of null hypotheses:

Hypothesis 2.01. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with the faculty of his/her department during doctoral study.

Hypothesis 2.02. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with other students in his/her department during doctoral study.

Hypothesis 2.03. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with his/her doctoral committee during doctoral study.

Hypothesis 2.04. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with his/her faculty advisor during doctoral study.

Hypothesis 2.05. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with the chair of his/her doctoral committee.

Hypothesis 2.06. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the student's perception of the quality and value of the course work.

Hypothesis 2.07. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the orientation the student received relative to the academic requirements of the department.

Hypothesis 2.08. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the orientation the student received relative to doctoral study in general.

Population

The 301 students who received the EdD from the College of Human Resources and Education at West Virginia University from August 1977 through August 1984 comprised the first population of this study. The number of graduates per academic unit was: Counseling and Guidance/Rehabilitation Counseling, 41; Curriculum and Instruction, 71; Education Administration, 74; Educational Psychology, 36; Health Education, 11; Special Education, 12; Reading, 27; and Technology Education, 29. Of the 301 graduates, current addresses were found for 254 individuals residing in the United States at the time of this study. Based on the addresses found, the number of graduates surveyed in each department was: Counseling and Guidance/Rehabilitation Counseling, 25; Curriculum and Instruction, 48; Education Administration, 52; Educational Psychology, 22; Health Education, 8; Special Education, 10; Reading, 21; and Technology Education, 26. The second population of this study consisted of the 287 individuals who, according to the Office of Admissions and Records, had been enrolled

as doctoral students in the College of Human Resources and Education, but had not registered for classes in 1983, and had not graduated.

Instrument

A questionnaire was specifically designed to collect data on the variables defined in this study. Both the graduates and nongraduates received the same questionnaire, through question number 36 (see Appendix A). The nongraduates received an additional seven questions (see Appendix B). Several features of the questionnaire, such as format of the questions, question order, layout, printing, and paper quality were based on specifications outlined by Dillman (1978).

The questionnaire was distributed to the doctoral committee, the Associate Director of Institutional Research at West Virginia University, and the supervisor of computing services at West Virginia University for their scrutiny. Their suggestions for content and computerization efficiency were incorporated into the questionnaire.

Pilot Study

The questionnaire was hand distributed to 20 individuals. Of those 20 individuals, 10 had completed EdD degrees from the College of Human Resources and Education, and 10 had not completed the degree. The individuals selected to pilot the questionnaire represented the various academic departments within the college to be surveyed during the study. These individuals were given one week in which to respond to the questionnaire. They were asked to make written and/or verbal comments on: (a) the amount of time it took to

complete it; (b) any items that were unclear; and (c) things that could be improved. The length of the questionnaire was a concern of the researcher and some committee members. Therefore, individuals were asked to particularly look at that aspect of the questionnaire.

None of the items posed any major problem for any of the individuals. As a result of some suggestions, a few items on the questionnaire were modified. Only two people believed that the length of the questionnaire might be a prohibitive factor in the response rate. Since no major changes were made to the original questionnaire, a second pilot study was not conducted.

General Procedure

The list of 301 students who had received the EdD from the College of Human Resources and Education between August 1977 and August 1984 was obtained from the Associate Dean for Graduate Studies and Research of the college. Addresses of the individuals were gathered from permanent records in the college's Office of Student Advising and Records. These addresses were checked against current records of the college's Alumni Association and phone books of various geographical locations. Individual faculty members throughout the college were then asked to provide additional corrections and information. Since many faculty members correspond with former students, they were able to provide the most accurate and comprehensive list of addresses of all of the sources consulted.

The Office of Admissions and Records at West Virginia University supplied the list of doctoral students, coded with an 08 or X8 number, who had enrolled in the College of Human Resources and Education. This list indicated the last date these individuals had enrolled in classes. It was impossible to determine, however, if this last date of enrollment meant that the student had graduated, temporarily discontinued classes, or terminated the doctoral program indefinitely. The 353 students on the list who had not enrolled in classes since the 1983 academic year were selected as the population of nongraduates for this study. The 1983 year was selected because that meant that students had not been enrolled at West Virginia University for at least one year prior to the study, an indication that they were permanently or temporarily discontinuing their doctoral studies. Furthermore, inaccurate addresses were a concern that ruled out the selection of students from earlier years. To avoid duplication, the names of the graduates were deleted from the list supplied by Admissions and Records. Once the duplications were eliminated, the 287 names remaining on the list became the population for study. The addresses supplied by the Office of Admissions and Records on these nongraduates were used with no attempt to find any more current information.

Of the 254 questionnaires sent to the graduates, 18 were returned because of wrong addresses. Although it was expected the wrong addresses would be more prevelant among the nongraduates, only 18 of the questionnaires from the group of 287 were returned for

incorrect addresses. This represented incorrect addresses on 6.7% of the total population, or 7% of the graduates, and 6.3% of the non-graduates.

A cover letter (see Appendix C) was sent by first class mail to all members of both groups, graduates and nongraduates, along with the appropriate questionnaire. A stamped, self-addressed envelope, which was to be returned to the Dean's Office of the College of Human Resources and Education, was also included for the return of the questionnaire.

One week later a postcard (see Appendix D) was sent to each participant regardless of whether he or she had returned the questionnaire. The card served as a reminder for those who had not yet responded, and as a "thank you" for those who had. After the mailing of the postcard, three weeks were allowed for any additional questionnaires to be returned. From the 254 questionnaires sent to graduates, a total of 215, or 84.65% were returned at the end of this three week period. Only 39 of the 254 graduates, or 15.35%, did not respond. Of the 215 questionnaires collected, there were 195 usable responses, 1 who did not wish to participate, 1 deceased, and 18 wrong addresses.

A total of 182 of the 287 questionnaires sent to nongraduates could be accounted for following the postcard mailing. This 63.64% response rate was divided into the following categories: 21 students "were definitely still pursuing the doctorate," 16 "were still working on the degree with the possibility of not finishing it," 4

students "were still working on the degree with the possibility of finishing it quite tenative," 18 "wrong addresses," 2 "unusable responses," 60 students who "were never enrolled in a doctoral program," and 61 students were in a doctoral program but "had no intentions to complete."

It was determined that a third mailing was not necessary since a response rate of over 50% of both graduates and nongraduates had been received. Therefore, the data collection phase of the study was then terminated and the data was subjected to statistical analysis.

Analysis

A minimum response rate of 50% was considered adequate for this study. Since the data supplied from the Office of Admissions was not entirely accurate, and current addresses of some doctoral recipients were not correct, the following formula for calculating the response rate, as proposed by Dillman (1978), was used.

$$\text{Response rate} = \frac{\text{number returned}}{\text{number in sample} - (\text{noneligible} + \text{nonreachable})} \times 100$$

After receiving the results from the mailing of the questionnaires, the responses were entered into the West Virginia University mainframe computer and analyzed by the Statistical Analysis System (SAS) computer program. The data were first analyzed through straight tabulation and then converted into percentages. This percentage was based on the total number of persons in each group (those

who have completed and have not completed the doctorate) who responded to the questionnaires.

To determine the statistical significance of the differences in the responses of the two groups, relative to the stated null hypothesis, a chi-square test was used on selected responses. This test was used because the data collected were expressed as frequencies rather than as measurements. Chi-square is a measure of the difference between observed and expected frequencies and was used in testing whether actual differences were greater than could be expected on the basis of chance variations. For this study, the .05 level of significance was established as the criteria for rejection of all null hypotheses. For hypotheses on which adequate responses were not received in the cells to run a chi-square, the data were collapsed into 2 x 2 tables and then run as either a chi-square or exact probability.

To test significant differences in those hypothesis in which a mean could be calculated on the responses, a *t* test was used. The .05 level of significance was established as the criteria for rejection of the null hypothesis.

For those hypotheses in which the respondents were asked to rate several items under one question on a scale of one to three (specifically, hypotheses 1.10, 1.18, 1.25, 1.26, 1.29, and 1.31), the numbers for the items were added and then categorized into three score categories with approximately one third of the respondents in each category. Then a chi-square analysis was used on the 2 x 3 contingency tables.

In order to statistically analyze differences between departments (hypotheses 2.01 through 2.08), a response rate of at least 10 people per department, or an expected cell entry of five, was needed. Any department receiving less than 10 responses was deleted from this part of the analysis. Chi-square tests were conducted on the responses of graduates and nongraduates in the departments that were analyzed. If a chi-square could not be conducted due to a lack of responses, the cells were collapsed and an exact probability was calculated.

CHAPTER 4

RESULTS

In order to compare possible relationships between selected psychological, sociological, and economic characteristics of doctoral students and the completion or noncompletion of Doctor of Education (EdD) degrees, 31 null hypotheses were constructed, tested, and answered. In addition, eight null hypotheses were constructed, tested, and answered to determine if differences between academic departments contribute to completion or noncompletion of the EdD. When testing the total 39 null hypotheses, either the chi-square or the t test was utilized to determine significant differences from chance expectations. The .05 significance level was established as the criterion for rejecting the null hypotheses.

The results of this study are presented in two parts. The first part will discuss psychological, sociological, and economic characteristics of doctoral students that influence the completion or noncompletion of the EdD. The second part will discuss the aspects of academic departments that influence completion or noncompletion of the doctorate.

Responses

A questionnaire was mailed to a total of 541 individuals including 254 graduates and 287 nongraduates. Table 1 represents the responses of the graduates by departments.

Table 1

Responses of Graduates by Departments

Department	Questionnaires mailed	Usable responses	Wrong address	Deceased	No response
Counseling & Guidance	33	26	3		4
Curriculum & Instruction	61	50	4		7
Education Administration	60	48	2		10
Educational Psychology	31	29	1		1
Health	9	5	1		3
Reading	23	12	5	1	5
Special Education	11	8	2		1
Technology Education	26	17	0		9
Totals	254	195	18	1	40

The following formula, proposed by Dillman (1978), was used to determine the response rate of this study:

$$\text{Response rate} = \frac{\text{number returned}}{\text{number in sample} - (\text{noneligible} + \text{nonreachable})} \times 100$$

Using the figures from Table 1, the response rate of the graduates was:

$$\text{Response rate} = \frac{195}{254 - (19)} \times 100$$

$$\text{Response rate} = 82.98\%$$

Table 2 represents the responses from the 287 nongraduates who were mailed questionnaires.

Table 2

Responses of Nongraduates

Individuals who were still working on the EdD with definite plans to finish	21
Individuals who were still working on the EdD but their plans to finish were subject to change	16
Individuals who were still working on the EdD but their plans to finish were quite tentative	4
Individuals who were never in an EdD program	60
Unusable responses	2
Wrong addresses	18
Individuals who had no intentions of completing the EdD degree	61
Total	182

Dillman's formula was not appropriate to use to calculate the response rate of the nongraduates since a great number of students from the original sample did not fit the definition of nongraduate in this study. Table 2 shows that of the 182 responses received from the 287 students in the original nongraduate sample, only 61

individuals, by the definition of this study, were nongraduates. It is reasonable to assume that the same ratio existed in the total population. Based on this assumption, it is reasonable to conclude that there were 96.19 eligible respondents in the original sample of 287. More specifically, 96.19 is the same ratio to 287 as 61 is to 182. Therefore, the following formula was used to calculate the response rate of nongraduates:

$$\text{Response Rate} = \frac{\text{Usable responses}}{\text{Eligible students in sample}}$$

$$\text{Response Rate} = \frac{61}{96.19}$$

$$\text{Response Rate} = 63.40\%$$

Responses by Academic Department

Table 3 summarizes the responses of this study by academic departments. Results for each of the null hypotheses are reported by variable title. If the variable is not significantly related to the completion or noncompletion of the EdD degree, the results are reported on answers given by the total respondents, both graduates and nongraduates. If the variable is significantly related to the completion or noncompletion of the EdD, then category values for graduates and nongraduates will be reported separately, in addition to results of the total respondents.

Table 3

Usable Responses From Graduates and Nongraduates by Academic Department

Academic department	Number of nongraduates	Number of graduates	Total number	Total percentages
Counseling & Guidance	3	26	29	11.28
Curriculum & Instruction	12	50	62	24.12
Education Administration	26	48	74	28.79
Educational Psychology	4	29	33	12.84
Health	1	5	6	2.33
Reading	3	13	16	6.23
Special Education	6	8	14	5.45
Technology Education	4	17	21	8.17
Miscellaneous[a]	2	0	2	0.78
Total numbers	61	196	257	
Total percentages	23.74	76.26		100.00

[a] This category represents responses from individuals who had been enrolled in an Inter-Disciplinary Studies program. This EdD degree program is no longer being offered at West Virginia University.

Sex

The null hypothesis tested was:

Hypothesis 1.01. There is no significant relationship between the completion and noncompletion of the EdD and the sex of the student.

The chi-square analysis failed to show a significant difference between males and females at the .05 level, as evidenced by a value of 1.126 (p=.2886) with 1 degree of freedom. Therefore, null hypothesis 1.01 could not be rejected.

The analysis of the total respondents, both graduates and nongraduates, showed that 49.81% were males and 50.19% were females. From the male respondents, 73.44% had graduated, while 79.07% of the female respondents had graduated.

Race

The null hypothesis tested was:

Hypothesis 1.02. There is no significant relationship between the completion and noncompletion of the EdD and the race of the student.

When the chi-square analysis was conducted, the minorities were combined so that a 2 x 2 contingency table could be analyzed. The Fisher's exact test (2-tail) indicated a probability of .3077 which was not significant at the .05 level. Therefore, null hypothesis 1.02 could not be rejected.

The majority of this study, 96.09%, was comprised of Caucasian/-White students. Other races represented were: Black/Afro-American, 1.56%; Asian Pacific, 1.17%; and Other, 1.17%. Of the total respondents, both graduates and nongraduates, 76.02% of the Caucasian/White students and 80% of the minority students completed the doctorate.

Marital Status

The null hypothesis tested was:

Hypothesis 1.03. There is no significant relationship between the completion and noncompletion of the EdD and the marital status of the student while working on the doctorate.

The chi-square value with 3 degrees of freedom was 4.852 (p=.1830) which was not significant at the .05 level. Therefore, null hypothesis 1.03 could not be rejected.

Responses from both graduates and nongraduates are represented in the following categories: "married during the entire period," 62.40%; "married after starting the doctoral program," 7.60%; and "was married but was widowed, separated or divorced during the period," 6.40%. A total of 76.40% of the individuals were married at some time during doctoral study while 23.60% were "single during the entire time." It was interesting to note that marital status did not change during doctoral study for 91.38% of the nongraduates, nor for 84.37% of the graduates.

Number of Children

The null hypothesis tested was:

Hypothesis 1.04. There is no significant relationship between the completion and noncompletion of the EdD and the number of children the student had while working on the doctorate.

The chi-square value with 3 degrees of freedom was 1.984 (p=.5756) which was not significant at the .05 level. Therefore, null hypothesis 1.04 could not be rejected.

During the time both graduates and nongraduates were working on their doctorates, 50.97% had no children, 18.68% had 1 child, 19.07%

had 2 children, and 11.28% had 3 or more children in their household for whom they were responsible.

Age When Beginning the Doctorate

The null hypothesis tested was:

Hypothesis 1.05. There is no significant relationship between the completion and noncompletion of the EdD and the student's age when beginning the doctorate.

The chi-square analysis with 8 degrees of freedom was 6.151 (p=.6303) which was not significant at the .05 level. Therefore, hypothesis 1.05 could not be rejected.

Individuals entered doctoral programs between the ages of 21 and 57. Although most individuals, 66.53%, entered their program before the age of 33, 33.47% of the students did enroll in doctoral programs between the ages of 34 and 57. The age categories in which individuals entered doctoral programs are reported in Table 4.

Age When Completing or Terminating the Doctorate

The null hypothesis tested was:

Hypothesis 1.06. There is no significant relationship between the completion and noncompletion of the EdD and the student's age when completing the doctorate.

The chi-square value, which was 4.618 (p=.7065) with 7 degrees of freedom, was not significant at the .05 level. Therefore, null hypothesis 1.06 could not be rejected.

The ages of individuals who either received the EdD degree, in the case of graduates, or chose to terminate their doctoral studies, in the case of the nongraduates, ranged from 25 to 60 years old.

While the majority of students terminated their programs by the age of 42, it was interesting to note that 15.48% either graduated or terminated their programs after the age of 43. The ages of individuals when they graduated or terminated EdD programs are reported in Table 5.

Table 4

Ages of Graduates and Nongraduates Upon Entering Doctoral Programs

Age categories in years	Percentages
21-25	11.42
26-27	13.78
28-29	16.14
30-31	14.17
32-33	11.02
34-35	9.06
36-38	8.27
39-43	7.87
44-57	8.27
Total	100.00

Table 5

Ages of Graduates and Nongraduates Upon Completing or Terminating Doctoral Programs

Age categories in years	Percentages
25-29	16.74
30-31	9.62
32-33	12.13
34-35	13.39
36-37	10.46
38-39	10.04
40-42	12.13
43-60	15.48
Total	99.99

Note. Total does not equal 100 due to rounding.

Immediate Family Who Pursued Postsecondary Education

The hypothesis tested was:

Hypothesis 1.07. There is no significant relationship between the completion and noncompletion of the EdD and the number of people from the student's immediate family who have pursued postsecondary education.

The chi-square analysis with 6 degrees of freedom was 7.068 (p=.315) which was not significant at the .05 level. Therefore, hypothesis 1.07 could not be rejected.

The number of people who pursued postsecondary education in this question included the student's parents and siblings. It was interesting to note that for about 20% of the respondents no one in their immediate family had pursued postsecondary education. For an additional 46% of the respondents only one or two people in their family either attended college or completed a college degree. The results from this question are represented in Table 6.

Table 6

Number of People in the Students' Immediate Family Who Pursued Postsecondary Education

Number in immediate family	Percentage of total sample
0	19.07
1	23.74
2	22.18
3	14.01
4	12.06
5	6.23
6	2.72
Total	100.01

Note. Total does not equal 100 due to rounding.

Educational Level of the Student's Parents

The null hypothesis tested was:

Hypothesis 1.08. There is no significant relationship between the completion and noncompletion of the EdD and the educational level of the student's parents.

A chi-square test was conducted on the mothers and fathers separately. The chi-square value for the fathers was 4.649 (p=.7027) with 7 degrees of freedom. The chi-square value for the mothers, with 4 degrees of freedom, was 2.976 (p=.5618). Neither value was significant at the .05 level. Therefore, hypothesis 1.08 could not be rejected.

Graduates and nongraduates responding to this questionnaire were asked to indicate, in separate responses, the highest level of education obtained by both their fathers and mothers. A total of 62.75% of the fathers had a high school education or less, as represented in the following categories: "did not complete elementary school," 9.02%; "completed elementary school," 25.49%; and "completed secondary school," 28.24%. Of the 34.51% of the fathers who obtained some education beyond secondary school, 13.73% "attended college," and an additional 8.63% "completed a 4-year college degree program." Only 7.84% of the fathers "completed master's degrees" and 4.31% "completed EdD or PhD degrees." An additional 2.75% of the fathers had "other" types of education such as vocational instruction and military training.

Mothers who had a high school education or less represented 64.31% of the responses in the following categories: "attended or

completed elementary school," 26.14%; and "completed secondary school," 38.17%. A total of 13.69% of the mothers "attended college," and an additional 14.94% "completed college." Only 7.05% of the mothers received a "master's" or "EdD/PhD" degree.

Place of Residence During the Most Formative Years

The null hypothesis tested was:

Hypothesis 1.09. There is no significant relationship between the completion and noncompletion of the EdD and the student's place of residence during the most formative years.

When the chi-square analysis was conducted, the "places of residence" were combined so that a 2 x 2 contingency table could be analyzed. The Fisher's exact test (2-tail) indicated a probability of .0085. Since this is significant at the .05 level, null hypothesis 1.09 was rejected.

On the questionnaire respondents were ask to select their primary place of residence during most of their formative years. They could select "farm," "rural nonfarm and populations up to 2,500," "town," "city," or "urban" either within West Virginia or within another state. In order to perform the chi-square test, the responses were collapsed into two categories, either those residences within West Virginia or within another state. Of the total respondents, both graduates and nongraduates, 47.47% resided in West Virginia during their formative years, and 52.53% resided in another state. Of the nongraduates, 62.30% grew up in West Virginia, while only 37.70% lived in another state. Only 42.86% of the graduates

lived in West Virginia, as compared to 57.14% who resided in another state during their formative years.

Personal Support From Individuals

The null hypothesis tested was:

Hypothesis 1.10. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of personal support from individuals.

Chi-square tests were conducted individualy on parents, grandparents, siblings, other relatives, and spouses. The chi-square values, all with 2 degrees of freedom, were determined for the following variables: parents, .094 (p=.9542); grandparents, 2.849 (p=.2407); siblings, 3.604 (p=.1650); other relatives, 2.076 (p=.3541); and spouses, 5.728 (p=.0571).

In addition to the chi-square analysis, a t test was conducted. The mean for the unsuccessful students was 6.933, whereas the mean for the successful students was 7.208. The t value with 78.7 degrees of freedom was -.8393 (p=.4038). Since none of the values from either the chi-square or t test analysis were significant at the .05 level, null hypothesis 1.10 could not be rejected.

On the questionnaire respondents were asked to rate, on a 3-point scale, to what extent their parents, grandparents, siblings, other relatives, and spouses provided personal support throughout their doctoral study. Table 7 presents the results of these responses.

Table 7

Personal Support Throughout Doctoral Study in Percentage of Nongraduates, Graduates, and Total Sample

Individuals	Percentage of Nongraduates	Graduates	Total sample
Parents			
None	28.33	27.84	27.95
Some	36.67	35.05	35.43
Great	35.00	37.11	36.61
Totals	100.00	100.00	99.99
Grandparents			
None	88.33	83.94	84.98
Some	5.00	11.92	10.28
Great	6.67	4.15	4.74
Totals	100.00	100.01	100.00
Siblings			
None	73.33	61.14	64.03
Some	15.00	26.42	23.72
Great	11.67	12.44	12.25
Totals	100.00	100.00	100.00
Other relatives			
None	71.67	67.01	68.11
Some	23.33	21.65	22.05
Great	5.00	11.34	9.84
Totals	100.00	100.00	100.00

Table 7, continued.

Individuals	Percentage of Nongraduates	Graduates	Total sample
Spouse			
None	30.00	29.69	29.76
Some	23.33	11.46	14.29
Great	46.67	58.85	55.95
Totals	100.00	100.00	100.00

Note. Totals do not equal 100 due to rounding.

It was interesting to note that spouses provided a "great" amount of personal support to 55.95% of the individuals pursuing doctorates. Parents provided "some to great" personal support for 72.04% of the respondents, while siblings and other relatives provided "some to great" support for approximately 34%. Grandparents provided the least amount of personal support.

Number of Semesters in Full-Time Study

The null hypothesis tested was:

Hypothesis 1.11. There is no significant relationship between the completion and noncompletion of the EdD and the number of semesters spent by the student in full-time study during the doctorate.

The chi-square value with 5 degrees of freedom was 122.8781 ($p=.0001$). Since this is a significant difference at the .05 level, hypothesis 1.11 was rejected.

The number of semesters graduates and nongraduates were enrolled as full-time doctoral students is reported on Table 8. Full-time status is considered to be a minimum of 9 hours, or equivalent work, per semester. Of the nongraduates answering this survey, 66.67% had "never been a full-time student," while only 3.59% of the graduates were in the same category. Most graduates, 63.59%, as compared to only 16.66% of the nongraduates, spent at least two semesters in full-time study.

Table 8

Number of Semesters in Full-Time Study in Percentage of Nongraduates, Graduates, and Total Sample

	Percentage of		
Number of semesters	Nongraduates	Graduates	Total sample
Never a full-time student	66.67	3.59	18.43
One semester	1.67	6.67	5.49
Two semesters	15.00	26.15	23.53
Three or four semesters	5.00	22.05	18.04
Five or more semesters	3.33	14.87	12.16
All of doctoral study	8.33	26.67	22.35
Totals	100.00	100.00	100.00

Place of Residence During Doctoral Study

The null hypothesis tested was:

Hypothesis 1.12. There is no significant relationship between the completion and noncompletion of the EdD and the student's place of residence during doctoral study.

A chi-square test was performed on the variables relating to "distance from the main campus during most of the course work for the doctorate." The chi-square value with 4 degrees of freedom was 35.2471 (p=.0001) which was significant at the .05 level. Therefore, null hypothesis 1.12 was rejected relative to distance from the University during course work.

When the chi-square analysis was conducted on "the distance from main campus while working on the dissertation," the cells were collapsed so that a 2 x 2 contingency table could be analyzed. The Fisher's exact test (2-tail) yielded a probability of .714 which was not significant at the .05 level. Therefore, null hypothesis 1.12 could not be rejected relative to distance from the University during the dissertation.

This question was divided into two parts on the questionnaire. Students were asked to indicate the distance, one-way, they lived from the main campus during most of their course work and while working on the dissertation. Table 9 shows the distance both graduates and nongraduates lived from the University during course work. Table 9 clearly indicates, in all categories, that graduates lived closer to the University than nongraduates.

Table 9

Distance from the University During Course Work in Percentage of Nongraduates, Graduates, and Total Sample

Distance in miles	Percentage of Nongraduates	Graduates	Total sample
0-20	26.23	66.67	57.03
21-40	24.59	8.21	12.11
41-60	22.95	7.69	11.33
61-80	9.84	7.69	8.20
81 or More	16.39	9.74	11.33
Totals	100.00	100.00	100.00

Of the 61 nongraduates who responded to the questionnaire, only 7 people, or 11.47%, reached the dissertation stage of their doctorate, while 54 people, or 88.52%, did not. Approximately one half of the total respondents, 51.53%, lived less than 80 miles from the University during the dissertation and the other half, 48.47%, lived a distance of 81 miles or more.

Physical Health

The hypothesis tested was:

Hypothesis 1.13. There is no significant relationship between the completion and noncompletion of the EdD and the physical health of the student during doctoral study.

The chi-square value was .227 (p=.6335) with 1 degree of freedom. This was not significant at the .05 level; therefore, null hypothesis 1.13 could not be rejected.

The majority of graduates, 96.37%, and nongraduates, 95%, rated their physical health either "good" or "excellent." Only 5% of the nongraduates and 3.63% of the graduates rated their health as "fair," "poor," or "very bad."

Emotional/Psychological Health

The null hypothesis tested was:

Hypothesis 1.14. There is no significant relationship between the completion and noncompletion of the EdD and the emotional/psychological health of the student during doctoral study.

With 2 degrees of freedom, the chi-square value was .039 (p=.9806). Since this was not significant at the .05 level, hypothesis 1.14 could not be rejected.

When asked to rate their overall emotional health during doctoral study, 38.66% of the graduates and 37.70% of the nongraduates, rated themselves as "excellent." Rating their emotional health as "good" were 44.33% of the graduates and 44.26% of the nongraduates. A rating of "fair," "poor," or "very bad" was indicated by 17.01% of the graduates and 18.03% of the nongraduates.

Number of Hours Employed

The null hypothesis tested was:

Hypothesis 1.15. There is no significant relationship between the completion and noncompletion of the EdD and the number of hours per week that the student was employed during doctoral study.

A chi-square analysis was conducted on the number of hours per week students were employed during most of their "course work." The chi-square value with 3 degrees of freedom was 26.600 (p=.0001), which was significant at the .05 level. Therefore, null hypothesis 1.15 was rejected relative to course work.

When analyzing responses on the number of hours students were employed while working on the "dissertation," the categories were collapsed into a 2 x 2 contingency table. The Fisher's exact test (2-tail) gave a probability of 1.000 which was not significant at the .05 level. Therefore, null hypothesis 1.15 was not rejected relative to the dissertation.

The number of hours students were employed during course work is recorded in Table 10. This table clearly indicates nongraduates were employed a greater number of hours than graduates.

While working on the dissertation 46.81% of the graduates and 46.15% of the nongraduates worked "up to 39 hours per week." Working "40 or more hours per week" were 53.19% of the graduates and 53.85% of the nongraduates.

Table 10

Number of Hours Employed During Course Work in Percentage of Nongraduates, Graduates, and Total Sample

	Percentage of		
Hours employed	Nongraduates	Graduates	Total sample
None	6.67	27.84	22.83
20 or less	8.33	17.01	14.96
21 to 39	8.33	15.98	14.17
40 or more	76.67	39.18	48.03
Totals	100.00	100.01	99.99

Note. Totals do not equal 100 due to rounding.

Time Period in Which Major Field of Study was Chosen

The null hypothesis tested was:

Hypothesis 1.16. There is no significant relationship between completion and noncompletion of the EdD and the time period in which the student decided on his/her major field of study of the doctorate.

The chi-square value with 5 degrees of freedom was 15.519 (p=.0084). This was a significant difference at the .05 level. Therefore, null hypothesis 1.16 was rejected.

On the questionnaire individuals were asked to indicate the time period in which they first seriously considered going into the major field of study of their doctoral work. The responses of graduates, nongraduates, and total sample are shown in Table 11.

Table 11

Time Period in Which Major Field of Study Was Chosen in Percentage of Nongraduates, Graduates, and Total Sample

Time period	Percentage of Nongraduates	Graduates	Total sample
Before or during high school or during the first 2 years of college	1.64	9.23	7.42
During the junior or senior year of college	3.28	8.72	7.42
Before master's study	16.39	9.23	10.94
During master's study	40.98	22.56	26.95
Before doctoral study	29.51	35.38	33.94
During doctoral study	8.20	14.87	13.28
Totals	100.00	99.99	99.95

Note. Totals do not equal 100 due to rounding.

It is interesting to note that 17.95% of the EdD recipients decided on their field of study before receiving their undergraduate degrees. In comparison, only 4.92% of the nongraduates chose their major fields that early in their careers. Another interesting fact is that almost 15% of the graduates did not decide on a field of study until they were enrolled in doctoral courses.

Level of Commitment to Career at Beginning of Doctoral Study

The null hypothesis tested was:

Hypothesis 1.17. There is no significant relationship between the completion and noncompletion of the EdD and the level of commitment to his/her career at the beginning of doctoral study.

The chi-square value with 2 degrees of freedom was 7.509 (p=.0234), which was significant at the .05 level. Therefore, null hypothesis 1.17 was rejected.

When asked to indicate their career plans at the time of enrolling in their program of doctoral study, 56.52% of the entire study said they "were definitely committed to the field and had a preference for a specific type of job in that field." An additional 27.27% were "definitely committed to the field, but had no preference for a specific type of job in that field." Only 16.21% were "trying out the field to see if it might lead to a "desirable career."

Of those who were "definitely committed to the field and had a preference for a specific job in that field," 56.77% were graduates and 55.74% were nongraduates. Indicating they were "definitely committed to the field, but had no preference for a specific type of job in that field," were 30.21% of the graduates and 18.03% of the nongraduates. Of the total nongraduate responses, 26.23% were "trying out the field to see if it might lead to a desirable career," as opposed to only 13.02% of the graduates who had the same level of commitment.

Motive for Beginning Doctoral Study

The null hypothesis tested was:

Hypothesis 1.18. There is no significant relationship between the completion and noncompletion of the EdD and the student's motive for beginning doctoral study.

The mean score on the answers given by nongraduates was 24.267, whereas the mean for graduates was 25.139. The *t* value with 252.0 degrees of freedom was -1.6275 (*p*=.1049). Since there was no significant difference between the means at the .05 level, null hypothesis 1.18 could not be rejected.

In addition to the *t* test analysis, a chi-square test for significance was conducted separately for each of the 12 variables. Only two items, both with 2 degrees of freedom, were statistically significant: "prestige," 5.941 (*p*=.0502); and "to acquire new knowledge," 13.489 (*p*=.0012).

Students were asked to consider several factors which might have influenced them to enter a doctoral program, and rate to what extent these factors may have influenced their decision. Table 12 gives the results of the combined percentages of graduates and nongraduates.

The two variables that were significant according to the chi-square analysis were "prestige" and "to acquire new knowledge." Graduates rated the "prestige" variable as follows: "none," 20.51%; "some," 51.79%; and "great," 27.69%. For the nongraduates the rating on the same variable was: "none," 31.15%; "some," 34.43%; and "great," 27.69%.

The following percentages of graduates rated the variable "to acquire new knowledge" as: "none," 2.05%; "some," 26.67%; and "great," 71.28%. Nongraduates rated the same variable as: "none," 11.48%; "some," 36.07%; and "great," 52.46%.

Table 12

Factors Influencing Decisions to Enter Doctoral Programs in Percentage of Total Sample

Factor influencing decision	Percentage
Possibility of new positions	
None	8.59
Some	26.56
Great	64.84
Total	99.99
Prestige	
None	23.05
Some	47.66
Great	29.30
Total	100.01
To improve research skills	
None	36.72
Some	42.58
Great	20.70
Total	100.00
To acquire new knowledge	
None	4.30
Some	28.91
Great	66.80
Total	100.01

Table 12, continued.

Factors Influencing Decisions to Enter Doctoral Programs in Percentage of Total Sample

Factor influencing decision	Percentage
To increase earning capacity	
None	16.08
Some	40.00
Great	43.92
Total	100.00
To specialize in a given field	
None	19.53
Some	35.55
Great	44.92
Total	100.00
Desire to work with college students	
None	37.25
Some	30.98
Great	31.76
Total	99.99
To advance in current job	
None	44.53
Some	21.48
Great	33.98
Total	99.99

Table 12, continued.

Factors Influencing Decisions to Enter Doctoral Programs in Percentage of Total Sample

Factor influencing decision	Percentage
To remain well qualified in my field	
None	14.84
Some	36.33
Great	48.83
Total	100.00
To become a better practitioner	
None	17.97
Some	30.08
Great	51.95
Total	100.00
Diversion from normal routines	
None	54.33
Some	28.74
Great	16.93
Total	100.00
Diversion from personal problems	
None	88.19
Some/great	11.81
Total	100.00

Note. Totals do not equal 100 due to rounding.

Source of Financial Subsidy

The null hypothesis tested was:

Hypothesis 1.19. There is no significant relationship between the completion and noncompletion of the EdD and the source of financial subsidy during doctoral study.

When the source of primary financial assistance was statistically analyzed, the chi-square value with 10 degrees of freedom was 35.829 (p=.0001). This part of the analysis was significant at the .05 level; therefore, null hypothesis 1.19 was rejected relative to primary source of financial subsidy.

The secondary source of financial assistance had a chi-square value of 16.492 (p=.1238) with 11 degrees of freedom and was not significant at the .05 level. Therefore, null hypothesis 1.19 was not rejected relative to the secondary source of financial subsidy.

The chi-square value of the third source of financial assistance was 13.873 (p=.2401) with 11 degrees of freedom which was not significant at the .05 level. Therefore, null hypothesis 1.19 was not rejected relative to the third source of financial subsidy.

From a list of possible sources of income, students were asked to rank up to three major kinds of assistance they received during doctoral study. These three sources of income were statistically analyzed separately. The primary source of financial subsidy of the total sample is represented in Table 13.

Table 13

Primary Sources of Financial Subsidy During Doctoral Study in Percentage of Nongraduates, Graduates, and Total Sample

Sources of income	Percentage of Nongraduates	Graduates	Total sample
Veterans' benefits	6.56	1.02	2.33
Scholarship, grant, fellowship	1.64	5.10	4.28
Assistantship	4.92	26.02	21.01
Savings	3.28	3.06	3.11
Leave with pay	0.00	1.02	0.78
Gifts/inheritances	0.00	0.51	0.39
Spouse's income	4.92	17.35	14.40
Your own full-time employment	73.77	39.80	47.86
Your own part-time employment	0.00	1.53	1.17
Loans	3.28	2.04	2.33
Investment income	1.64	2.55	2.33
Totals	100.01	99.99	99.99

Note. Totals do not equal 100 due to rounding.

The primary source of income, indicated by 47.86% of all doctoral students, was their own full-time employment. Of this 47.86%, 30.35% were EdD recipients, while 17.51% were nongraduates. Assistantships, representing 21.01% of the total responses, were the second most important source of primary financial assistance. Of this 21.01%, 19.84% of the respondents were graduates and 1.17% had not received the EdD. The third most important source of primary income listed was "spouse's income." Of the 14.40% of all students who listed this source, 13.23% had received the EdD and 1.17% had not. The secondary source of financial subsidy during doctoral study of the total sample is indicated, in percentages, in Table 14.

"Spouse's income" was listed the most frequently by all respondents, 27.85%, as the secondary source of financial assistance. Of this 27.85%, 18.72% were graduates and 9.13% were nongraduates. The second most important source of secondary financial assistance, for 12.33% of the students, was "assistantships." This 12.33% was comprised of 10.96% graduates and 1.37% nongraduates.

Table 14

Secondary Sources of Financial Subsidy During Doctoral Study in Percentage of Total Sample

Source of income	Percentage of total sample
Veterans' benefits	4.11
Scholarship, grant, fellowship	3.20
Assistantship	12.33
Savings	11.42
Leave with pay	3.20
Gifts/inheritances	0.91
Spouse's income	27.85
Your own full-time employment	11.42
Your own part-time employment	10.50
Loans	8.68
Investment income	3.65
Other	2.74
Total	100.01

Note. Total does not equal 100 due to rounding.

Students were asked to indicate a third major source of financial assistance while pursuing the doctorate, if they had one. The results are presented in Table 15.

Table 15

Third Major Source of Financial Subsidy During Doctoral Study in Percentage of Total Sample

Source of income	Percentage
Veterans' benefits	2.50
Scholarship, grant, fellowship	3.13
Assistantship	7.50
Savings	31.25
Leave with pay	4.38
Gifts/inheritances	5.00
Spouse's income	9.38
Your own full-time employment	5.00
Your own part-time employment	8.13
Loans	12.50
Investment income	4.38
Other	6.88
Total	100.03

Note. Total does not equal 100 due to rounding.

The most frequently listed third source of financial assistance, 31.25%, was "savings." Of the nongraduates responding, 51.85% relied on savings as a third source of financial subsidy, as compared to

27.07% of the graduates. Ranking second in the third area of financial support were "loans" at 12.50%. The percentage of nongraduates relying on loans was 18.52% as opposed to 11.28% of the graduates.

For the nongraduates, their "own full-time employment," representing 73.77%, was the major source of funding. Their secondary source of financial assistance, 45.45%, was derived from "spouse's income." The nongraduates listed "savings," 51.85%, as their third source of financial assistance.

Their "own full-time employment" was the primary source of income for 39.80% of all graduates, with an additional 26.02% indicating "assistantships." The main source of secondary income for graduates, 23.43%, was "spouse's income." When listing their third source of financial assistance, 27.07% of the graduates indicated "savings."

Financial Subsistence Level

The null hypothesis tested was:

Hypothesis 1.20. There is no significant relationship between the completion and noncompletion of the EdD and the financial subsistence level during doctoral study.

The chi-square value with 3 degrees of freedom was 7.940 (p=.0473) which was significant at the .05 level. Therefore, null hypothesis 1.20 was rejected.

Responses from the total sample, both graduates and nongraduates, indicated that 36.63% of the students were "never concerned about finances," 28.40% "had enough money for expenses and

emergencies," 18.52% "had enough money for expenses but nothing for emergencies," and 16.46% "had enough money for expenses but was in debt."

"Finances were never a concern" for approximately the same percentage of graduates and nongraduates, 36.96% and 35.59% respectively. Only 16.95% of the nongraduates indicated they had "enough money for expenses and emergencies," as compared to 32.07% of the graduates. While 22.03% of the nongraduates "had enough money for expenses but nothing for emergencies," only 17.39% of the graduates were in this category. Of the graduates responding, 13.59% "had enough money for expenses but was in debt" as compared to 25.42% of the nongraduates.

Relationship With Departmental Faculty

The null hypothesis tested was:

Hypothesis 1.21. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with the faculty of his/her department during doctoral study.

The chi-square value was 38.807 (p=.0001) with 3 degrees of freedom which was significant at the .05 level. Therefore, null hypothesis 1.21 was rejected.

On the questionnaire respondents were asked to select the statement which best described their interaction with the faculty in their department. The results from the nongraduates, graduates, and total sample are shown in Table 16.

Table 16

Interaction With Faculty Members During Doctoral Study in Percentage of Nongraduates, Graduates, and Total Sample

Interaction with faculty	Percentage of Nongraduates	Graduates	Total sample
I liked them, discussed ideas with them, and was stimulated by them.	42.62	76.29	68.24
I accepted them, discussed ideas with them, but did not particularly like them as a body.	21.31	13.40	15.29
I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them.	9.84	7.22	7.84
I was generally neutral toward them.	26.23	3.09	8.63
Totals	100.00	100.00	100.00

Of the EdD recipients who responded to this item on the questionnaire, 76.29% indicated that they "liked the faculty, discussed academic ideas with them, and was stimulated by them," while only 42.62% of the nongraduates responded in the same category. Of the graduates, only 3.09% felt "generally neutral toward them" as compared to 26.23% of the nongraduates.

Relationship With Students in the Department

The null hypothesis tested was:

Hypothesis 1.22 There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with other students in his/her department during doctoral study.

The chi-square value was 19.554 (p=.0002) with 3 degrees of freedom. Since this is significant at the .05 level, null hypothesis 1.22 was rejected.

Individuals were asked to rate their interaction with students in their departments during doctoral study. Table 17 shows the results of graduates, nongraduates, and the total sample.

As Table 17 indicates, 70.21% of the graduates indicated they "liked them, discussed academic ideas with them, and was stimulated by them," while 62.30% of the nongraduates chose the same response. Of the graduates responding, 13.83% indicated they "accepted them, discussed ideas with them, but did not particularly like them as a body," whereas only 4.92% of the nongraduates responded in this category. The response "generally neutral toward them" was given by 32.79% of the nongraduates, as opposed to 11.17% of the graduates.

Table 17

Interaction With Other Students During Doctoral Study in Percentage of Nongraduates, Graduates, and Total Sample

Interaction with students	Percentage of Nongraduates	Graduates	Total sample
I liked them, discussed academic ideas with them, and was stimulated by them.	62.30	70.21	68.27
I accepted them, discussed ideas with them, but did not particularly like them as a body.	4.92	13.83	11.65
I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them.	0.00	4.79	3.61
I was generally neutral toward them.	32.79	11.17	16.47
Totals	100.01	100.00	100.00

Note. Totals do not equal 100 due to rounding.

Relationship With Doctoral Committee

The null hypothesis tested was:

Hypothesis 1.23. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with his/her doctoral committee during doctoral study.

The mean score for nongraduates was 13.789, whereas the mean for graduates was 17.949. The *t* value with 212 degrees of freedom was -5.5483 (*p*=.0001). This difference between the means was significant at the .05 level.

A chi-square analysis was conducted on each of the seven items respondents rated on the questionnaire. The chi-square values for each of the items, all with 2 degrees of freedom, were: "willing to give good, positive suggestions," 7.713 (*p*=.0055); "reasonable and amendable to my ideas and suggestions," 18.625 (*p*=.0001); "active and accessible," 9.186 (p=.0101); "interested in me as a person," 23.384 (*p*=.0001); "helpful and encouraging," 46.931 (*p*=.0001); "timely with feedback," 35.322 (*p*=.0001); and "reasonable in their expectations," 23.708 (*p*=.0001). All of the chi-square values were significant at the .05 level. Since both the *t* test and chi-square values were significant, hypothesis 1.23 was rejected.

Table 18 presents the summary of responses, in percentages, of nongraduates, graduates, and the total sample. It was interesting to note that over 50% of the graduates rated their committees as "great" on all seven items. On six of the items only 15-25% of the nongraduates, however, rated their committees as "great." Only one item, "willing to give good, positive suggestions" was rated "great" by 31% of the nongraduates. Table 18 indicates that graduates generally rated the characteristics of their doctoral committees much higher than nongraduates.

Table 18

Relationship With Doctoral Committee in Percentage of Nongraduates, Graduates, and Total Sample

Committee characteristics	Percentage of Nongraduates	Graduates	Total sample
Willing to give good, positive suggestions			
None/Some	68.42	35.90	38.79
Great	31.58	64.10	61.21
Totals	100.00	100.00	100.00
Reasonable and amendable to my ideas and suggestions			
None	5.26	3.59	3.74
Some	78.95	30.77	35.05
Great	15.79	65.64	61.21
Totals	100.00	100.00	100.00
Active and accessible			
None	15.79	4.62	5.61
Some	63.16	42.05	43.93
Great	21.05	53.33	50.47
Totals	100.00	100.00	100.00
Interested in me as a person			
None	42.11	7.18	10.28
Some	31.58	38.46	37.85
Great	26.32	54.36	51.87
Totals	100.00	100.00	100.00

Table 18, continued.

Relationship With Doctoral Committee in Percentage of Nongraduates, Graduates, and Total Sample

Committee characteristics	Percentage of Nongraduates	Graduates	Total sample
Helpful and encouraging			
None	36.84	2.05	5.14
Some	47.37	38.97	39.72
Great	15.79	58.97	55.14
Totals	100.00	100.00	100.00
Timely with feedback			
None	42.11	5.13	8.41
Some	47.37	38.97	38.72
Great	10.53	55.90	51.87
Totals	100.01	100.00	100.00
Reasonable in their expectations			
None	15.79	3.59	4.67
Some	68.42	26.15	29.91
Great	15.79	70.26	65.42
Totals	100.00	100.00	100.00

Note. Totals do not equal 100 due to rounding.

Relationship With Faculty Advisor

The null hypothesis tested was:

Hypothesis 1.24. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with his/her faculty advisor during doctoral study.

The chi-square value with 4 degrees of freedom was 36.024 (p=.0001). This is a significant difference at the .05 level. Therefore, null hypothesis 1.24 was rejected.

Individuals were given a list of statements from which they were to choose the one that best described their most recent faculty advisor. Table 19 shows the answers provided by the nongraduates, graduates, and total sample.

Only 7.94% of the total respondents felt that their faculty advisor "was not supportive or helpful." Of the nongraduates, however, 28.33% felt that their faculty advisor "really didn't care about them," whereas only 5.21% of the graduates felt this way. Moreover, 41.67% of the graduates felt that their advisors were "super people who went far beyond the student's expectations" as compared to 11.67% of the nongraduates.

Table 19

Relationship With Faculty Advisor in Percentage of Nongraduates, Graduates, and Total Sample

Statement	Percentage of Nongraduates	Graduates	Total sample
S/he was not at all supportive or helpful. At times I felt that s/he was against me and that I had to do everything without any help from him/her.	10.00	7.29	7.94
At times I felt that s/he didn't really care about me. S/he was not really against me, but s/he could have helped me more.	28.33	5.21	10.71
S/he seemed fair and impartial. S/he would help me when I approached him/her, but seldom gave support or help of his/her own initiative.	20.00	14.58	15.87
S/he was very helpful. I felt that s/he was on my side and wanted me to be successful.	30.00	31.25	30.95
S/he was a super person. S/he went far beyond what I had expected him/her to do in helping and encouraging me.	11.67	41.67	34.52
Totals	100.00	100.00	99.99

Note. Totals do not equal 100 due to rounding.

Relationship With Doctoral Committee Chair

The null hypothesis tested was:

Hypothesis 1.25. There is no significant relationship between the completion and noncompletion of the EdD and the relationship the student experienced with the chair of his/her doctoral committee.

The chi-square value was 179.682 (p=.0001) with 4 degrees of freedom. Since this is significant at the .05 level, hypothesis 1.25 was rejected.

Students were asked to rate the chair of their doctoral committee/dissertation on the same scale on which they rated faculty advisors. The results of the nongraduates, graduates, and total sample are presented in Table 20.

Almost half, 11.86%, of the 27.11% of the nongraduates who reached the dissertation stage of their doctoral programs, felt their dissertation chairs "were not at all supportive or helpful." Of the nongraduates responding, 72.88% terminated their doctoral programs before the dissertation stage. Of the graduates who responded, 34.87% felt their doctoral committee/dissertation chair was "very helpful," as compared to only 5.08% of the nongraduates. Rating their chairperson as "super" were 46.15% of the graduates and only 3.39% of the nongraduates.

Table 20

Relationship With Doctoral Committee/Dissertation Chair in Percentage of Nongraduates, Graduates, and Total Sample

Statement	Percentage of Nongraduates	Graduates	Total sample
S/he was not at all supportive or helpful. At times I felt that s/he was against me and that I had to do everything without any help from him/her. At times I felt that s/he didn't really care about me. S/he was not really against me, but s/he could have helped me more.	11.86	10.26	10.63
S/he seemed fair and impartial. S/he would help me when I approached him/her, but seldom gave support or help of his/her own initiative.	6.78	8.72	8.27
S/he was very helpful. I felt that s/he was on my side and wanted me to be successful.	5.08	34.87	27.95
S/he was a super person. S/he went far beyond what I had expected him/her to do in helping and encouraging me.	3.39	46.15	36.22
I was not far enough along in the program to have a dissertation committee chair.	72.88	0.00	16.93
Totals	99.99	100.00	100.00

Note. Totals do not equal 100 due to rounding.

Perception of Quality and Value of Course Work

The null hypothesis tested was:

Hypothesis 1.26. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of the quality and value of course work.

The mean score for nongraduates was 10.283 and 11.171 for graduates. The *t* value with 251.0 degrees of freedom was -3.8536 (*p*=.0001). The difference between the means, therefore, was significant at the .05 level.

A chi-square analysis was conducted separately on each response item on the questionnaire. The items, each with 2 degrees of freedom, had the following chi-square values: "intellectually stimulating," 9.45 (*p*=.0089); "irrelevant," 15.310 (*p*=.0005); "appropriate to my professional goals," 8.285 (*p*=.0159); "provided adequate opportunities for practical experiences," 5.274 (*p*=.0716); "provided a great deal of self-direction and freedom," 33.934 (*p*=.0001). Since both the *t* test and chi-square values were significant at the .05 level, hypothesis 1.26 was rejected.

Respondents were asked to rate to what extent their course work, in general, met their needs and expectations. Table 21 is a summary of the responses, in percentages, of nongraduates, graduates, and total sample. In general, as Table 21 indicates, graduates rated the variables related to course work higher than the nongraduates. Over 55% of the nongraduates rated all of the items at the midpoint of the scale, whereas the majority of the graduates rated most items at the top of the scale. The item that received the lowest rating from both

graduates and nongraduates was "provide adequate opportunities for practical experiences."

Table 21

Quality and Value of Course Work in Percentage of Nongraduates, Graduates, and Total Sample

Description of course work	Percentage of Nongraduates	Graduates	Total sample
Intellectually stimulating			
No extent	8.20	5.13	5.86
Some extent	63.93	44.62	49.22
Great extent	27.87	50.26	44.92
Totals	100.00	100.01	100.00
Irrelevant			
No extent	27.87	53.09	47.06
Some extent	57.38	42.27	45.88
Great extent	14.75	4.64	7.06
Totals	100.00	100.00	100.00
Appropriate to my professional goals			
No extent	8.33	2.56	3.92
Some extent	60.00	48.21	50.98
Great extent	31.67	49.23	45.10
Totals	100.00	100.00	100.00

Table 21, continued.

Quality and Value of Course Work in Percentage of Nongraduates, Graduates, and Total Sample

Description of course work	Percentage of Nongraduates	Graduates	Total sample
Provide adequate opportunities for practical experiences			
No extent	22.95	14.43	16.47
Some extent	55.74	50.00	51.37
Great extent	21.31	35.57	32.16
Totals	100.00	100.00	100.00
Provide a great deal of self-direction and freedom			
No extent	18.03	4.10	7.42
Some extent	63.93	38.46	44.53
Great extent	18.03	57.44	48.05
Totals	99.99	100.00	100.00

Note. Totals do not equal 100 due to rounding.

Orientation to Academic Expectations of the Department

The null hypothesis tested was:

Hypothesis 1.27. There is no significant relationship between the completion and noncompletion of the EdD and the orientation the student receives to the academic expectations of the department.

The chi-square value on information provided by the department with 4 degrees of freedom was 31.045 (p=.0001). This was significant at the .05 level.

The chi-square value on information provided by West Virginia University sources with 4 degrees of freedom was 20.373 (p=.0004). This was significant at the .05 level. Since the answers to both questions dealing with this hypothesis were statistically significant, hypothesis 1.27 was rejected.

Students were asked to rate the extent to which they received information on academic expectations of their departments prior to beginning their doctoral programs. First, they were asked to rate the academic information provided by faculty members within the department and, second, the academic information provided by other West Virginia University sources. Tables 22 and 23 summarize the responses of nongraduates, graduates, and total sample relative to academic information provided by the department and other West Virginia University sources, respectively.

The tables indicate that graduates, in general, perceived their orientation information concerning academic requirements, from both their respective departments and West Virginia University sources, to be more complete than did nongraduates. Orientation information provided by the department was perceived to be more complete by both graduates and nongraduates than the information provided by West Virginia University sources.

Table 22

Extent of Academic Orientation Information Provided by Academic Departments in Percentage of Nongraduates, Graduates, and Total Sample

Extent of information	Percentage of Nongraduates	Graduates	Total sample
Extremely complete	8.20	32.82	26.95
Considerably complete	26.23	27.18	26.95
Moderately complete	27.87	26.67	26.95
Rather incomplete	14.75	9.23	10.55
Almost nonexistent	22.95	4.10	8.59
Totals	100.00	100.00	99.99

Note. Totals do not equal 100 due to rounding.

Table 23

Extent of Academic Orientation Information Provided by West Virginia University Sources in Percentage of Nongraduates, Graduates, and Total Sample

Extent of information	Percentage of Nongraduates	Graduates	Total sample
Extremely complete	5.08	22.91	18.49
Considerably complete	18.64	25.14	23.53
Moderately complete	20.34	22.91	22.27
Rather incomplete	11.86	10.61	10.92
Almost nonexistent	44.07	18.44	24.79
Totals	99.99	100.01	100.00

Note. Totals do not equal 100 due to rounding.

Orientation to Doctoral Study in General

The null hypothesis tested was:

Hypothesis 1.28. There is no significant relationship between the completion and noncompletion of the EdD and the orientation the student received to graduate study in general.

The chi-square value of information provided by faculty members within the department was 13.222 (p=.0102) with 4 degrees of freedom. The chi-square value of information provided by West Virginia University sources was 10.8333 (p=.0285). The responses to both sections

of this question were statistically significant. Therefore, null hypothesis 1.28 was rejected.

Students were asked to rate to what extent they received information, prior to beginning doctoral study, on support services and the rights and privileges of graduate students while at West Virginia University. Information received from faculty members within the department and other West Virginia University sources were rated separately. Table 24 presents the orientation information provided to nongraduates, graduates and total sample by the department. Table 25 represents the responses for information provided by West Virginia University sources.

Graduates, as compared to nongraduates, perceived the orientation information they received concerning support services from both the department and West Virginia University sources, to be more complete (see Tables 24 and 25). It is interesting to note that 46.03% of both the graduates and nongraduates perceived this information to be "rather incomplete" or "nonexistent" from the department; 52.15% of the same respondents rated information from West Virginia University sources in the same categories.

Table 24

Extent of Orientation Information on Support Services Provided by Academic Departments in Percentage of Nongraduates, Graduates, and Total Sample

Extent of information	Percentage of Nongraduates	Graduates	Total sample
Extremely complete	6.67	15.08	12.97
Considerably complete	10.00	24.02	20.50
Moderately complete	18.33	21.23	20.50
Rather incomplete	23.33	14.53	16.74
Almost nonexistent	41.67	25.14	29.29
Totals	100.00	100.00	100.00

Table 25

Extent of Orientation Information on Support Services Provided by West Virginia University Sources in Percentage of Nongraduates, Graduates, and Total Sample

Extent of information	Percentage of Nongraduates	Graduates	Total sample
Extremely complete	5.17	9.77	8.62
Considerably complete	10.34	18.97	16.81
Moderately complete	15.52	24.71	22.41
Rather incomplete	12.07	13.22	12.93
Almost nonexistent	56.90	33.33	39.22
Totals	100.00	100.00	99.99

Note. Totals do not equal 100 due to rounding.

Difficulty Incurred or Perceived With the Dissertation

The null hypothesis tested was:

Hypothesis 1.29. There is no significant relationship between the completion and noncompletion of the EdD and difficulty incurred with the dissertation.

The mean value for the scores of the nongraduates was 18.489 and 15.810 for the graduates. With 240 degrees of freedom, the t value was 4.8550 (p=.0001). This difference between the means was significant at the .05 level.

Chi-square tests, with 2 degrees of freedom, were run on 10 separate items relative to the doctoral dissertation. The chi-square values of the individual items were: "selecting a topic," 3.128 (p=.2093); "developing the prospectus," 0.129 (p=0.9376); "securing prospectus approval," 28.651 (p=.0001); "securing adequate support from dissertation chair," 47.535 (p=.0001); "applying research skills," 5.818 (p=.0545); "conducting the literature review," 10.040 (p=.0066); "writing the dissertation," 6.625 (p=.0364); "organizing everything that needed to be done," 0.477 (p=.7878); "locating resources (computer, statistician, typist)," 12.695 (p=.0018); and "oral defense," 18.890 (p=.0001). Of these 10 items, 7 were significant at the .05 level and 3 were not. Since the t test values and the majority of the chi-square values were significant at the .05 level, null hypothesis 1.29 was rejected.

Students were asked to rate, on a 3-point scale, the extent to which they experienced difficulty during the dissertation stage of the doctorate. If they did not reach the dissertation stage, individuals were asked to rate the items based on the level of difficulty they would anticipate having. Table 26 gives the results of each item, in percentages, of the nongraduates, graduates, and total sample.

Table 26

Difficulty Experienced or Perceived During the Dissertation Stage in Percentage of Nongraduates, Graduates, and Total Sample

Committee characteristics	Percentage of Nongraduates	Graduates	Total sample
Selecting a topic			
None	26.53	35.38	33.61
Some	63.27	49.23	52.05
Great	10.20	15.38	14.34
Totals	100.00	99.99	100.00
Developing the prospectus			
None	28.57	30.26	29.92
Some	61.22	58.46	59.02
Great	10.20	11.28	11.07
Totals	99.99	100.00	100.01
Securing prospectus approval			
None	18.75	61.03	52.67
Some	66.67	29.23	36.63
Great	14.58	9.74	11.52
Totals	100.00	100.00	100.00

Table 26, continued.

Difficulty Experienced or Perceived During the Dissertation Stage in Percentage of Nongraduates, Graduates, and Total Sample

Committee characteristics	Percentage of Nongraduates	Graduates	Total sample
Securing adequate support from dissertation chair			
None	31.25	79.49	69.96
Some	50.00	10.77	18.52
Great	18.75	9.74	11.52
Totals	100.00	100.00	100.00
Applying research skills			
None	33.33	47.18	44.44
Some	54.17	48.21	49.38
Great	12.50	4.62	6.17
Totals	100.00	100.01	99.99
Conducting the literature review			
None	39.58	64.62	59.67
Some	52.08	30.26	34.57
Great	8.33	5.13	5.76
Totals	99.99	100.01	100.00

Table 26, continued.

Difficulty Experienced or Perceived During the Dissertation Stage in Percentage of Nongraduates, Graduates, and Total Sample

Committee Characteristics	Percentage of Nongraduates	Graduates	Total Sample
Writing the dissertation			
None	16.33	27.18	25.00
Some	57.14	60.00	59.43
Great	26.53	12.82	15.57
Totals	100.00	100.00	100.00
Organizing everything that needed to be done			
None	37.50	42.56	41.56
Some	54.17	50.77	51.44
Great	8.33	6.67	7.00
Totals	100.00	100.00	100.00
Locating resources (computer, typist, statistician)			
None	35.42	52.82	49.38
Some	43.75	41.54	41.98
Great	20.83	5.64	8.64
Totals	100.00	100.00	100.00
Oral defense			
None	36.17	64.62	59.09
Some	42.55	30.26	32.64
Great	21.28	5.13	8.26
Totals	100.00	100.01	99.99

Note. Totals do not equal 100 due to rounding.

Table 26 indicates that over 50% of the nongraduates felt they would have at least "some" difficulty with 8 of the 10 stages. In comparison, at least 47% of the graduates had "no" difficulty with 6 of the stages. At least 18.75% of the nongraduates indicated they would have "great" difficulty with "securing adequate support from dissertation chair," "writing the dissertation," "locating resources," and "oral defense." Only one category, "selecting a topic" was rated "great" by 15.38% of the graduates. None of the other dissertation stages rated as "great" had over 12.82% of the responses from graduates.

Student's Perception of the Value of the Doctorate

The null hypothesis tested was:

Hypothesis 1.30. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of the value of the doctorate.

With 2 degrees of freedom, the chi-square value was 68.223 (p=.0001). Since this is significant at the .05 level, null hypothesis 1.30 was rejected.

Responses from the total sample, both graduates and nongraduates, indicated individuals had the following personal feelings toward the doctorate: "although doctoral study is expensive, in the long run it should be an excellent economic investment," 39.84%; "doctoral study is expensive and it is a doubtful economic investment but the nonmaterial rewards compensate for the financial problems," 44.62%; and "doctoral study is much too expensive and I doubt that

even in the long run the material and nonmaterial rewards will compensate for it," 15.54%.

When asked to rate their personal feelings toward the doctorate, 46.88% of the graduates felt that "although doctoral study is expensive, in the long run it should be an excellent economic investment." However, only 16.95% of the nongraduates selected this response. Of the graduates responding, 47.92% indicated that "doctoral study is expensive and it is a doubtful economic investment, but the nonmaterial rewards compensate for the financial problems," whereas only 33.90% of the nongraduates felt the same way. "Doctoral study is much too expensive and that in the long run material and nonmaterial rewards will not compensate for it," was chosen as the response by 49.15% of the nongraduates, as compared to only 5.21% of the graduates.

Student's Perception of Doctoral Study When First Enrolled

The null hypothesis tested was:

Hypothesis 1.31. There is no significant relationship between the completion and noncompletion of the EdD and the student's perception of doctoral study when first enrolled.

A chi-square analysis, with 1 degree of freedom, was conducted separately on each of the items. The Fisher's exact test (2-tail) gave the following probabilities: "intellectual capability required," (p=.1430); "amount of money required," (p=.2013); "amount of time required," (p=-.094); and "amount of stress and anxiety involved," (p=.4546). None of these items was significant at the .05 level. Therefore, null hypothesis 1.31 could not be rejected.

Of the total respondents, graduates and nongraduates, 92.91% indicated they had an accurate perception of the "amount of intellectual capability required" as opposed to 7.09% who said they did not. The "amount of money required" was accurately perceived by 79.13% of the respondents as opposed to 20.87% who did not have an accurate perception. Although 67.32% of the total sample correctly perceived the "amount of time required," 32.68% did not. The "amount of stress/anxiety involved" was accurately perceived by approximately half, or 51.98% of the total sample; 48.02% the students did not accurately perceive this variable.

A second set of hypotheses was constructed to determine if any of eight variables within academic departments contributed to the completion or noncompletion of the EdD degree. A minimum response rate of 10 people, or an expected cell entry of 5 per department, was determined as the criterion for analyzing differences between departments. The minimum number of responses was received from only two departments, Curriculum and Instruction and Education Administration. Therefore, only these two departments are compared in this section. Table 27 was constructed to show the Fisher's exact probability and phi values for each variable analyzed in this section.

Table 27

Fisher's Exact Probability Test (2-tail) and Phi Values for Hypotheses 2.01 Through 2.08

Variable	Fisher's Exact Test (2-tail)		Phi	
	C & I	Ed. Ad.	C & I	Ed. Ad.
Relationship with faculty	0.0651	0.0165	0.259	0.301
Relationship with students	0.0526	0.0109	-0.263	0.333
Relationship with doctoral committee				
Positive suggestions	0.1653	1.0000	0.219	0.057
Reasonable/Amendable	0.0278	0.0393	0.336	0.312
Active/Accessible	0.1777	0.0393	0.207	0.312
Interested in me	0.0530	0.6098	0.299	0.144
Helpful/Encouraging	0.0189	0.0327	0.334	0.324
Timely feedback	0.0676	0.0221	0.268	0.351
Reasonable expectations	0.0045	0.0143	0.418	0.380
Relationship with faculty advisor	0.0344	0.0002	0.294	0.452
Relationship with dissertation chair	0.0393	0.0013	0.337	0.520
Quality and value of course work				
Intellectually stimulating	0.7468	0.0011	0.070	0.395
Irrelevant	0.3419	0.0052	0.126	-0.341

Table 27, continued.

Fisher's Exact Probability Test (2-tail) and Phi Values for Hypotheses 2.01 Through 2.08

Variable	Fisher's Exact Test (2-tail)		Phi	
	C & I	Ed. Ad.	C & I	Ed. Ad.
Appropriate to professional goals	0.7396	0.0809	-0.063	0.230
Practical experiences	0.7322	0.0158	-0.046	0.293
Self-Direction and freedom	0.0256	0.0000	0.296	0.558
Academic orientation by dept.	0.5289	0.0000	0.098	0.523
General orientation by dept.	0.7307	0.0000	0.087	0.486

Relationship With Departmental Faculty

The null hypothesis tested was:

Hypothesis 2.01. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with the faculty of his/her department during doctoral study.

In the Curriculum and Instruction Department the Fisher's exact probability test (2-tail) value was 0.0651 with a phi of 0.259 (see Table 27). Since this was not significant at the .05 level, null hypothesis 2.01 could not be rejected.

In the Education Administration Department, the Fisher's exact probability test (2-tail) value was 0.0165 with a phi of 0.301 (see

Table 27). Since this was significant at the .05 level, null hypothesis 2.01 was rejected.

Students were asked to select, from four choices on the questionnaire, the statement which came closest to describing their interactions with the faculty in their department. Before the chi-square analysis was conducted, the categories were collapsed into a 2 x 2 contingency table.

In the Curriculum and Instruction Department, 85.25% of the total respondents, both graduates and nongraduates, chose one of the following statements to describe their relationship with departmental faculty: "I liked them, discussed academic ideas with them, and was stimulated by them" or "I accepted them, discussed ideas with them, but did not particularly like them as a body." Of the total Curriculum and Instruction respondents, 14.75% indicated they "generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them" or "were generally neutral toward them."

The majority of both graduates and nongraduates, 78.38%, in the Education Administration Department chose one of the following statements to describe their interaction with the faculty: "I liked them, discussed academic ideas with them, and was stimulated by them," or "I accepted them, discussed ideas with them, but did not particularly like them as a body." Statements chosen by 21.62% percent of the total Education Administration respondents were: "I generally avoided them except when necessary, and on occasion felt somewhat

negatively inclined toward most of them" or "I was generally neutral toward them."

Of the Education Administration respondents, 87.50% of the graduates and 61.54% of the nongraduates selected the responses: "I liked them, discussed academic ideas with them, and was stimulated by them," or "I accepted them, discussed ideas with them, but did not particularly like them as a body." Conversely, 38.46% of the nongraduates in Education Administration, as compared to only 12.50% of the graduates, described their relationship with the faculty as: "I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them" or "I was generally neutral toward them."

Relationship With Students in the Department

The null hypothesis tested was:

Hypothesis 2.02. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with other students in his/her department during doctoral study.

Table 27 indicates a Fisher's exact probability test (2-tail) value of 0.0526 with a phi of -0.263 on responses given by students in the Curriculum and Instruction Department. Since this value is not significant at the .05 level, hypothesis 2.02 could not be rejected.

Table 27 indicates a Fisher's exact probability test (2-tail) value of 0.0109 with a phi of 0.333 on responses given by students in

the Education Administration Department. Since this value is significant at the .05 level, hypothesis 2.02 was rejected.

On the questionnaire respondents were asked to choose, from four statements, the one that best described their interaction with other students in the department. Responses from the total sample were collapsed into a 2 x 2 contingency table before the chi-square analysis was conducted.

Of the total respondents, graduates and nongraduates, in the Curriculum and Instruction Department, 78.33% chose one of the following statments to describe their interaction with other students in the department: "I liked them, discussed academic ideas with them, and was stimulated by them" or "I accepted them, discussed ideas with them, but did not particularly like them as a body." On the other hand, 21.67% indicated: "I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them" or "I was generally neutral toward them."

Of the Curriculum and Instruction students responding, 72.92% of the graduates and 100% of the nongraduates chose the following statements to describe their interaction with other students: "I liked them, discussed academic ideas with them, and was stimulated by them" or "I accepted them, discussed ideas with them, but did not particularly like them as a body." Only 27.08% of the graduates and none of the nongraduates selected "I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them" or "I was generally neutral toward them."

The total percentage of students in Education Administration responded very similarly to this question. Of all the students responding, both graduates and nongraduates, who were enrolled in the Education Administration program, 78.38% chose: "I liked them, discussed academic ideas with them, and was stimulated by them" or "I accepted them, discussed ideas with them, but did not particularly like them as a body" to describe their interactions with other students. In comparison, 21.62% of the total Education Administration respondents chose "I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them" or "I was generally neutral toward them."

Of those students enrolled in Education Administration, 84.44% of the graduates and 53.85% of the nongraduates described their interaction with other students as: "I liked them, discussed academic ideas with them, and was stimulated by them" or "I accepted them, discussed ideas with them, but did not particularly like them as a body." Only 12.50% of the graduates, as compared to 38.46% of the nongraduates chose the following statements: "I generally avoided them except when necessary, and on occasion felt somewhat negatively inclined toward most of them" or "I was generally neutral toward them."

Relationship With Doctoral Committee

The null hypothesis tested was:

Hypothesis 2.03. There is no significant relationship of the completion and noncompletion of the EdD between academic departments

and the relationship the student experienced with his/her doctoral committee during doctoral study.

A chi-square analysis was conducted separately on seven different items. The Fisher's exact probability test (2-tail) and phi values for each item rated by students in both the Curriculum and Instruction and Education Administration Departments are recorded in Table 27.

For the Curriculum and Instruction Department, four of the seven items were significant at the .05 level. Those items were: "reasonable and amendable," "interested in me as a person," "helpful and encouraging," and "reasonable in their expectations." The five items that were significant in the Education Administration Department were: "reasonable and amendable," "active and accessible," "helpful and encouraging," "timely with feedback," and "reasonable in their expectations."

Respondents were asked to rate, on a 3-point scale, the extent to which their doctoral committee had certain characteristics. Before the chi-square analysis was conducted, the responses were collapsed to a 2 x 2 table. Tables 28 and 29 give the responses from Curriculum and Instruction and Education Administration, respectively.

Table 28

Relationship With Doctoral Committee in Percentage of Nongraduates, Graduates, and Total Sample in Curriculum and Instruction

Response	Percentage of C & I nongraduates	C & I graduates	Total C & I sample
Willing to give good, positive suggestions			
To no/some extent	80.00	42.00	45.45
To a great extent	20.00	58.00	54.55
Totals	100.00	100.00	100.00
Reasonable and amendable to my ideas and suggestions			
To no/some extent	80.00	26.00	30.91
To a great extent	20.00	74.00	69.09
Totals	100.00	100.00	100.00
Active and accessible			
To no/some extent	80.00	44.00	47.27
To a great extent	20.00	56.00	52.73
Totals	100.00	100.00	100.00

Table 28, continued.

Relationship With Doctoral Committee in Percentage of Nongraduates, Graduates, and Total Sample in Curriculum and Instruction

Response	Percentage of C & I nongraduates	C & I graduates	Total C & I sample
Interested in me as a person			
To no/some extent	100.00	48.00	52.73
To a great extent	0.00	52.00	47.27
Totals	100.00	100.00	100.00
Helpful and encouraging			
To no/some extent	100.00	42.00	47.27
To a great extent	0.00	58.00	52.73
Totals	100.00	100.00	100.00
Timely with feedback			
To no/some extent	100.00	54.00	58.18
To a great extent	0.00	46.00	41.82
Totals	100.00	100.00	100.00
Reasonable in their expectations			
To no/some extent	100.00	30.00	36.36
To a great extent	0.00	70.00	63.64
Totals	100.00	100.00	100.00

Table 29

Relationship With Doctoral Committee in Percentage of Nongraduates, Graduates, and Total Sample in Education Administration

Response	Percentage of Ed. Ad. nongraduates	Ed. Ad. graduates	Total Ed. Ad. sample
Willing to give good, positive suggestions			
To no/some extent	50.00	39.58	40.38
To a great extent	50.00	60.42	59.62
Totals	100.00	100.00	100.00
Reasonable and amendable to my ideas and suggestions			
To no/some extent	100.00	41.67	46.15
To a great extent	0.00	58.33	53.85
Totals	100.00	100.00	100.00
Active and accessible			
To no/some extent	100.00	41.67	46.15
To a great extent	0.00	58.33	53.85
Totals	100.00	100.00	100.00
Interested in me as a person			
To no/some extent	75.00	47.92	50.00
To a great extent	25.00	52.08	50.00
Totals	100.00	100.00	100.00

Table 29, continued.

Relationship With Doctoral Committee in Percentage of Nongraduates, Graduates, and Total Sample in Education Administration

Response	Percentage of Ed. Ad. nongraduates	Ed. Ad. graduates	Total Ed. Ad. sample
Helpful and encouraging			
To no/some extent	100.00	39.58	44.23
To a great extent	0.00	60.42	55.77
Totals	100.00	100.00	100.00
Timely with feedback			
To no/some extent	100.00	35.42	40.38
To a great extent	0.00	64.58	59.62
Totals	100.00	100.00	100.00
Reasonable in their expectations			
To no/some extent	100.00	31.25	36.54
To a great extent	0.00	68.75	63.46
Totals	100.00	100.00	100.00

Relationship With Faculty Advisor

The null hypothesis tested was:

Hypothesis 2.04. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the relationship the student experienced with his/her faculty advisor during doctoral study.

The Fisher's exact probability test (2-tail) value for students in the Curriculum and Instruction Department was 0.0344 with a phi of 0.294 (see Table 27). Since this value was significant at the .05 level, null hypothesis 2.04 was rejected.

The Fisher's exact probability test (2-tail) value for students in the Education Administration Department was 0.0002 with a phi of 0.452 (see Table 27). Since this value was significant at the .05 level, null hypothesis 2.04 was rejected.

From five statements on the questionnaire, students were asked to choose the one that best described their feelings about their most recent faculty advisor. Answers were collapsed into 2 x 2 tables before the chi-square analysis was conducted. Tables 30 and 31 show the responses from Curriculum and Instruction and Education Administration, respectively.

Table 30

Relationship With Faculty Advisors in Percentage of Nongraduates, Graduates, and Total Sample in Curriculum and Instruction

Response	Percentage of C & I nongraduates	C & I graduates	Total C & I sample
S/he was not at all supportive or helpful. At times I felt that s/he was against me and that I had to do everything without any help from him/her," or "At times I felt that s/he didn't really care about me. S/he was not really against me, but s/he should have helped me more," or "S/he seemed fair and impartial. S/he would help me when I approached him/her, but seldom gave support or help of his/her own initiative."	58.33	24.00	30.65
"S/he was very helpful. I felt that s/he was on my side and wanted me to be successful," or "S/he was a super person. S/he went far beyond what I had expected him/her to do in helping and encouraging me."	41.67	76.00	69.35
Totals	100.00	100.00	100.00

Table 31

Relationship With Faculty Advisors in Percentage of Nongraduates, Graduates, and Total Sample in Education Administration

Response	Percentage of Ed. Ad. nongraduates	Ed. Ad. graduates	Total Ed. Ad. sample
"S/he was not at all supportive or helpful. At times I felt that s/he was against me and that I had to do everything without any help from him/her," or "At times I felt that s/he didn't really care about me. S/he was not really against me, but s/he should have helped me more," or "S/he seemed fair and impartial. S/he would help me when I approached him/her, but seldom gave support or help of his/her own initiative."	64.00	18.75	34.25
"S/he was very helpful. I felt that s/he was on my side and wanted me to be successful," or "S/he was a super person. S/he went far beyond what I had expected him/her to do in helping and encouraging me."	36.00	81.25	65.75
Totals	100.00	100.00	100.00

Relationship With Dissertation Chair

The null hypothesis tested was:

Hypothesis 2.05. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the

relationship the student experienced with the chair of his/her doctoral committee.

Table 27 shows the Fisher's exact probability test (2-tail) value as 0.0393 with a phi of 0.337 for the responses from the Curriculum and Instruction Department. Since this value is significant at the .05 level, null hypothesis 2.05 was rejected.

Table 27 shows the Fisher's exact probability test (2-tail) value as 0.0013 with a phi of 0.520 for the responses from the Education Administration Department. Since this value is significant at the .05 level, null hypothesis 2.05 was rejected.

Students were asked to select, from six statements on the questionnaire, the one that came nearest to describing their feelings about their most recent dissertation committee chairperson. The answers were collapsed into 2 x 2 tables for analysis. The results for Curriculum and Instruction are reported in Table 32, and the results from Education Administration in Table 33.

Table 32

Relationship With Dissertation Committee Chairperson in Percentage of Nongraduates, Graduates, and Total Sample in Curriculum and Instruction

Response	Percentage of C & I nongraduates	C & I graduates	Total C & I sample
S/he was not at all supportive or helpful. At times I felt that s/he was against me and that I had to do everything without any help from him/her," or "At times I felt that s/he didn't really care about me. S/he was not really against me, but s/he should have helped me more," or "S/he seemed fair and impartial. S/he would help me when I approached him/her, but seldom gave support or help of his/her own initiative."	75.00	20.00	24.07
"S/he was very helpful. I felt that s/he was on my side and wanted me to be successful," or "S/he was a super person. S/he went far beyond what I had expected him/her to do in helping and encouraging me."	25.00	80.00	75.93
Totals	100.00	100.00	100.00

Table 33

Relationship With Dissertation Committee Chairperson in Percentage of Nongraduates, Graduates, and Total Sample in Education Administration

Response	Percentage of Ed. Ad. nongraduates	Percentage of Ed. Ad. graduates	Percentage of Total Ed. Ad. sample
S/he was not at all supportive or helpful. At times I felt that s/he was against me and that I had to do everything without any help from him/her," or "At times I felt that s/he didn't really care about me. S/he was not really against me, but s/he should have helped me more," or "S/he seemed fair and impartial. S/he would help me when I approached him/her, but seldom gave support or help of his/her own initiative."	83.33	14.58	22.22
"S/he was very helpful. I felt that s/he was on my side and wanted me to be successful," or "S/he was a super person. S/he went far beyond what I had expected him/her to do in helping and encouraging me."	16.67	85.42	77.78
Totals	100.00	100.00	100.00

Perception of the Quality and Value of Course Work

The null hypothesis tested was:

Hypothesis 2.06. There is no significant relationship of the completion and noncompletion of the EdD between academic departments

and the student's perception of the quality and value of the course work.

A chi-square test was conducted on five separate items. The Fisher's exact probabilities and phi values for Curriculum and Instruction and Education Administration students are recorded in Table 27. Only one item, "provided a great deal of self-direction and freedom" was significant in the Curriculum and Instruction Department. In the Education Administration Department the following four variables were significant: "intellectually stimulating," "irrelevant," "provided adequate opportunities for practical experiences," and "provided a great deal of self-direction and freedom."

Respondents were asked to rate, on a 3-point scale, the extent to which their course work, in general, met their needs and expectations. The answers were combined and analyzed in 2 x 2 tables. Responses from the Curriculum and Instruction Department are summarized in Table 34 and responses from Education Administration in Table 35.

Table 34

Perception of Quality and Value of Course Work in Percentage of Nongraduates, Graduates, and Total Sample in Curriculum and Instruction

Response	Percentage of C & I nongraduates	Percentage of C & I graduates	Percentage of Total C & I sample
Intellectually stimulating			
To no/some extent	66.67	58.00	59.68
To a great extent	33.33	42.00	40.32
Totals	100.00	100.00	100.00
Irrelevant			
To no extent	50.00	34.69	37.70
To some/great extent	50.00	65.31	62.30
Totals	100.00	100.00	100.00
Appropriate to my professional goals			
To no/some extent	58.33	66.00	64.52
To a great extent	41.67	34.00	35.48
Totals	100.00	100.00	100.00
Provide adequate opportunities for practical experiences			
To no/some extent	66.67	72.00	70.97
To a great extent	33.33	28.00	29.03
Totals	100.00	100.00	100.00

Table 34, continued.

Perception of Quality and Value of Course Work in Percentage of Nongraduates, Graduates, and Total Sample in Curriculum and Instruction

Response	Percentage of C & I nongraduates	C & I graduates	Total C & I sample
Provide a great deal of self-direction and freedom			
To no/some extent	83.33	46.00	53.23
To a great extent	16.67	54.00	46.77
Totals	100.00	100.00	100.00

Table 35

Perception of Quality and Value of Course Work in Percentage of Nongraduates, Graduates, and Total Sample in Education Administration

Response	Percentage of Ed. Ad. nongraduates	Ed. Ad. graduates	Total Ed. Ad. sample
Intellectually stimulating			
To no/some extent	84.62	43.75	58.11
To a great extent	15.38	56.25	41.89
Totals	100.00	100.00	100.00

Table 35, continued.

Perception of Quality and Value of Course Work in Percentage of Nongraduates, Graduates, and Total Sample in Education Administration

Response	Percentage of Ed. Ad. nongraduates	Ed. Ad. graduates	Total Ed. Ad. sample
Irrelevant			
To no extent	15.38	50.00	37.84
To some/great extent	84.62	50.00	62.16
Totals	100.00	100.00	100.00
Appropriate to my professional goals			
To no/some extent	72.00	47.92	56.16
To a great extent	28.00	52.08	43.84
Totals	100.00	100.00	100.00
Provide adequate opportunities for practical experiences			
To no/some extent	88.46	60.42	70.27
To a great extent	11.54	39.58	29.73
Totals	100.00	100.00	100.00
Provide a great deal of self-direction and freedom			
To no/some extent	100.00	43.75	63.51
To a great extent	0.00	56.25	36.49
Totals	100.00	100.00	100.00

Orientation to the Academic Requirements of the Department

The null hypothesis tested was:

Hypothesis 2.07. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the orientation the student received relative to the academic requirements of the department.

The Fisher's exact probability test (2-tail) value for Curriculum and Instruction was 0.5289 with a phi of 0.098 (see Table 27). Since this value was not significant at the .05 level, null hypothesis 2.07 was not rejected.

The Fisher's exact probability test (2-tail) value for Education Administration was 0.0000 with a phi of 0.523 (see Table 27). Since this value was significant at the .05 level, null hypothesis 2.07 was rejected.

Students were asked to rate, on a scale of 1 to 5, the extent to which faculty members within their departments provided them with information about academic expectations prior to beginning doctoral study. Answers were collapsed into a 2 x 2 table for analysis.

Of the total responses in the Curriculum and Instruction Department, 51.62% indicated their information was either "extremely" or "considerably" complete, while 48.39% rated their information as "moderately complete," "rather incomplete," or "almost nonexistent."

In the Education Administration Department, 58.11% of the total respondents rated their information as "extremely" or "considerably" complete, whereas 41.89% rated their information as "moderately complete," "rather incomplete," or "almost nonexistent."

Of the graduates in the Education Administration Department, 77.08% rated their information on academic expectations as either "extremely complete" or "considerably complete," as opposed to only 23.08% of the nongraduates who gave the same responses. Rating their information as "moderately complete," "rather incomplete," or "almost nonexistent" were 76.92% of the nongraduates and 22.92% of the graduates.

Orientation to Doctoral Study in General

The null hypothesis tested was:

Hypothesis 2.08. There is no significant relationship of the completion and noncompletion of the EdD between academic departments and the orientation the student received relative to doctoral study in general.

Table 27 shows a Fisher's exact probability test (2-tail) value of 0.7307 with a phi of 0.087 for the responses from the Curriculum and Instruction Department. Since this value is not significant at the .05 level, hypothesis 2.08 was not rejected.

Table 27 shows a Fisher's exact probability test (2-tail) value of 0.0000 with a phi of 0.486 for the responses from the Education Administration Department. Since this value is significant at the .05 level, hypothesis 2.08 was rejected.

Students were asked to select the answer that best described the information they received, before they began doctoral study, from faculty members within the department, on support services such as housing, loans, health care, and rights and privileges of graduate students. The responses were collapsed to a 2 x 2 table for analysis.

Of the total respondents from the Curriculum and Instruction Department, 32.73% rated information received as "extremely complete" or "considerably complete," as compared to 67.27% who felt their information was "moderately complete," "rather incomplete," or "almost nonexistent."

In the Education Administration department, 33.33% of both the graduates and nongraduates rated their information as "extremely complete" or "considerably complete." Of the total respondents, 66.67% rated their information as "moderately complete," "rather incomplete," or "almost nonexistent."

Of the nongraduates responding in the Education Administration Department, 96% rated their information as "moderately complete," "rather incomplete," or "almost nonexistent," as compared to only 4% who said it was "extremely complete" or "moderately complete." Conversely, 48.78% of the graduates said their information was "moderately complete," "rather incomplete," or "almost nonexistent," as compared to 51.22% who felt their information was "extremely complete" or "considerably complete."

CHAPTER 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This study compared doctoral students in the College of Human Resources and Education at West Virginia University who completed all requirements for the EdD degree with those students who had been admitted to an EdD program, but who either became inactive or terminated their program prior to degree completion. The population of graduates for study consisted of all students who had received the EdD degree from August 1977 through August 1984. Comprising the population of nongraduates were those individuals who had been admitted to EdD programs, had not taken classes since the 1983 academic year, had not graduated, and had no intentions of finishing the degree. Any student who was actively pursuing the degree was not included in the population for study.

A questionnaire, specifically designed for this study, was mailed to 254 individuals who had received the EdD degree, and 287 who had not. Responses were received from 82.98% of the graduates and 63.40% of the nongraduates. The data were then analyzed by the Statistical Analysis System (SAS) computer program which produced the statistical values used in this study.

The two groups were compared on selected psychological, sociological, and economic characteristics. The findings of these comparisons are presented in three parts. The first part reports a summary

of: (a) the variables that were and were not significant between the graduates and nongraduates surveyed in this study and (b) the departmental characteristics that were and were not significantly related to those who completed and those who did not complete the EdD. The second section presents the conclusions gained from the investigation. The final section gives the implications of the study.

Summary

The factors investigated by this study in which a significant difference between the graduated and nongraduated groups occured were:

1. Place of residence during the most formative years
2. Number of semesters spent in full-time doctoral study
3. Student's place of residence during most of the course work for the EdD
4. Number of hours per week the student was employed during most of the course work
5. Time period in which the student decided on his/her major field of study of the doctorate
6. Level of commitment to his/her career at the beginning of doctoral study
7. Source of primary financial subsidy
8. Financial subsistence level
9. Relationship with the faculty in his/her department
10. Relationship with the other students in his/her department
11. Relationship with his/her doctoral committee
12. Relationship with his/her faculty advisor
13. Relationship with his/her doctoral committee chair

14. Student's perception of the quality and value of course work

15. Orientation, by both the department and other West Virginia University sources, the student received to the academic expectations of the department

16. Orientation, by both the department and other West Virginia University sources, the student received to graduate study in general, support services, and rights and privileges of graduate students

17. Difficulty incurred with the dissertation

18. Student's perception of the value of the doctorate

The following items were not significant when graduates and nongraduates were compared:

1. Sex

2. Race

3. Marital status

4. Number of dependent children living in the household

5. Age when beginning the doctorate

6. Age when completing or terminating the doctorate

7. Number of people from the student's immediate family who had pursued postsecondary education

8. Educational level of the student's parents

9. Student's perception of personal support from individuals

10. Student's place of residence during the dissertation stage of the EdD

11. Physical health

12. Emotional/psychological health

13. Number of hours per week the student was employed during the dissertation stage of the doctorate

14. Student's motive for beginning doctoral study

15. Second and third sources of financial subsidy

16. Student's perception of doctoral study when first enrolled

When comparing differences between graduates and nongraduates within the Curriculum and Instruction and Education Administration Departments, the following variables were significant:

1. Relationship with departmental faculty in the Education Administration Department

2. Relationship with other students in the Education Administration Department

3. In the Curriculum and Instruction Department characteristics of doctoral committees were: reasonable and amendable to ideas and suggestions, interested in the student as a person, helpful and encouraging, and reasonable in their expectations

4. In the Education Administration Department characteristics of doctoral committees were: reasonable and amendable to ideas and suggestions, active and accessible, helpful and encouraging, timely with feedback, and reasonable in their expectations

5. Relationship with faculty advisor in both departments

6. Relationship with dissertation chair in both departments

7. Student's perception of the quality and value of course work in the Education Administration Department on the following items: intellectually stimulating, irrelevant, provided practical experiences, and provided self-direction and freedom

8. Student's perception of the self-direction and freedom provided by the course work in Curriculum and Instruction

9. Orientation provided by the department on the academic expectations of the department in the Education Administration Department

10. Orientation provided by the department on support services and the rights and privileges of graduate students in the Education Administration Department

Variables that were not significant when these groups were compared within the two departments were:

1. Relationship with departmental faculty in the Curriculum and Instruction Department
2. Relationship with other students in the Curriculum and Instruction Department
3. In the Curriculum and Instruction Department characteristics of doctoral committees were: willing to give good and positive suggestions, active and accessible, and timely with feedback
4. In the Education Administration Department characteristics of doctoral committees were: willing to give good and positive suggestions, and interested in the student as a person
5. Student's perception of the value and quality of course work in the Curriculum and Instruction Department on the following items: intellectually stimulating, irrelevant, appropriate to professional goals, and provide adequate opportunities for practical experiences
6. Student's perception of the appropriateness of course work to their professional goals in the Education Administration Department
7. Orientation provided by the department on the academic expectations of the department in the Curriculum and Instruction Department
8. Orientation provided by the department on support services and the rights and privileges of graduate students in the Curriculum and Instruction Department

Conclusions

From the analysis of the data the following general conclusions were drawn concerning the psychological, sociological, and economic factors that correlated with the completion or noncompletion of doctoral programs in the College of Human Resources and Education at

West Virginia University. These conclusions are subject to the limitations described in Chapter I.

Sex. In this study it is interesting to note that males and females were represented almost equally, 49.81% and 50.19%, respectively. Further, females had a slightly higher completion rate, 79.07%, as compared to the males, 73.44%. Since this variable was not statistically significant, it is reasonable to conclude that gender was not an important variable in explaining completion or noncompletion of EdD degrees.

Race. Only 10 people, or 3.91%, of the total 257 respondents in this study were considered minorities. Of these 10 people, 8 had completed the EdD and 2 had not. It is interesting to note that 80% of the minorities and 76.02% of the Caucasian/White students completed the EdD. Since this variable was not statistically significant, it is reasonable to conclude that race was not an important variable in explaining completion or noncompletion of EdD degrees.

Marital Status. A slightly higher percentage of nongraduates, compared to graduates, in this study were married during the entire doctoral study. Inversely, a slightly higher percentage of graduates, compared to nongraduates, were single during the entire doctoral study. The marital status did not change during doctoral study for 91.38% of the nongraduates, nor for 84.37% of the graduates. Since this variable was not statistically significant, it is reasonable to conclude that marital status was not an important variable in explaining completion or noncompletion of EdD degrees.

Number of Children. An interesting finding in this study was that one half of the students, graduates and nongraduates combined, had no children. Only 11% had three or more children. Since this variable was not statistically significant, it is reasonable to conclude that the number of children the student had in the household for whom s/he was responsible was not an important variable in explaining completion or noncompletion of EdD degrees.

Student's Age When Beginning the Doctorate. While 66.53% of all students entered doctoral programs before the age of 33, 33.47% of all students began doctoral work after the age of 34. It was interesting to note that 8.72% of the graduates entered doctoral programs between the ages of 44 and 57. Since this variable was not statistically significant, it is reasonable to conclude that the age of the student when beginning the doctoral program was not an important variable in explaining completion or noncompletion of EdD degrees.

Student's Age When Completing or Terminating the Doctorate. Students either completed EdD degrees, or chose to terminate their doctoral programs, between the ages of 25 and 60. Most students, 72.38%, had either received the EdD degree or had terminated their programs by the time they were 39 years old. It is interesting to note, however, that 15.48% of the students completed or terminated their programs between the ages of 43 and 60. For the successful students, 17.10% completed the EdD after the age of 43. Since this variable was not statistically significant, it is reasonable to conclude that the age of the student when completing or terminating the

doctorate was not an important variable in explaining completion or noncompletion of EdD degrees.

Number of People from the Immediate Family Who Had Pursued Postsecondary Education. The responses to this question included both the parents and siblings of the student's family. Responses from both graduates and nongraduates indicated that for 19.07% no one in their immediate family had pursued postsecondary education. Only one person from 23.74% of the students' families had pursued an education beyond secondary school. Further, 22.18% of the respondents had only two members of their family continue their education beyond secondary school. Therefore, the majority of students, 65%, had very few role models within their family units who had pursued postsecondary education. Since this variable was not statistically significant, it is reasonable to conclude that the number of people from the student's immediate family who had pursued postsecondary education was not an important variable in explaining completion or noncompletion of EdD degrees.

Educational Level of the Students' Parents. It was interesting to note that only 12.15% of the fathers and 7.05% of the mothers of both graduates and nongraduates had obtained either a master's degree or a doctorate. A slightly higher percentage of the mothers, 14.94%, compared to the fathers, 8.63%, completed a four year college program. Of those parents who had less than a four year undergraduate college degree, 76.48% were fathers and 78% were mothers. It was interesting to find that the large majority of individuals in this

study who chose to pursue doctorates did not have parents as role models. Since this variable was not statistically significant, it is reasonable to conclude that the educational level of the student's parents was not an important variable in explaining completion or noncompletion of the EdD degree.

Place of Residence During the Most Formative Years. Individuals who resided in West Virginia during their most formative years had a higher noncompletion rate than those who resided in another state. Of the West Virginia residents, 42.86% completed the doctorate as opposed to 62.30% who did not. In comparison, 57.14% of the out-of-state residents completed the doctorate while 37.70% did not. While the data do not reflect a statistical explanation for this finding, the following three factors could possibly explain this difference: (a) individuals raised in the Appalachian culture may not have the self-confidence and aspiration levels needed to complete the requirements for a doctorate; (b) the public school system in West Virginia may not provide the necessary skills to pursue advanced education; and, (c) for individuals who were raised in West Virginia and want to remain in the state, the job market for people with EdD degrees is limited. Therefore, they may not see the value in a doctorate degree. Since this variable was statistically significant, it is reasonable to conclude that the place of residence during the individual's formative years was an important variable in explaining completion or noncompletion of the EdD degree.

Personal Support From Individuals. The most personal support to individuals pursuing doctorates was provided by the spouse, followed by parents, siblings, and then other relatives. Grandparents provided the least amount of support. Of all of the people who provided personal support to the doctoral student, the spouse was the only variable that came close to being statistically significant. These results are not surprising as it seems most unlikely that many students with families would embark upon such a long and strenuous mental, physical, and economical undertaking without the approval of family members, especially the spouse. Income from the spouse was a very important source of financial subsidy during doctoral study, particularly if the student was enrolled full-time. It is also quite possible that every member of the immediate family experienced some degree of deprivation in order for the student-member to pursue the EdD. In addition to the spouse experiencing a lack of time and attention from the student, s/he would also possibly have to assume additional child-rearing responsibilities when children were in the home. The support and encouragement from the spouse was an important factor for both graduates and nongraduates.

It was interesting to note that parents provided either "some" or "a great amount" of personal support to 72.04% of the students surveyed, especially when approximately 77% of the parents did not have a college education themselves. It would seem that these parents value education and see the advantages of having a good education in today's society, although they themselves did not, or could

not, avail themselves of the opportunity for a college education. It is not surprising that grandparents provided the least amount of personal support to doctoral students. In many cases, it is quite possible that the grandparents were deceased before the individual had enrolled in doctoral study. Since this variable was not statistically significant, it is reasonable to conclude that the student's perception of personal support from individuals was not an important variable in explaining completion or noncompletion of the EdD.

Amount of Time in Full-Time Study. A large proportion of unsuccessful students, 66.67%, were never full-time students, while only 16.66% were full-time students for three or more semesters. Conversely, more than one fourth of the graduates, 26.67%, were full-time students during their entire doctoral study and an additional 36.92% were full-time students for three or more semesters. The establishment of full-time residency is probably a good indication of the strength of students' desire to earn the doctorate. Those students fortunate enough to be able to pursue the doctorate on a full-time basis probably (a) realized that doctoral study would require their undivided attention, (b) had strong family support, and (c) had the financial resources with which to maintain a sufficient subsistence level. It is likely that the establishment of full-time status would make it more difficult for individuals to withdraw from the program had they become discouraged by problems, demands, or needs. Since full-time students probably would not have to divide their time for other demands such as job requirements, it is logical

that they would have more time and opportunities to (a) become part of the intellectual community, (b) develop closer and more effective relationships with the faculty and other students in their departments, and (c) become more involved in professional organizations, publishing, collaborating on projects, and presenting papers at professional meetings.

Those students who spent three or more semesters in full-time study probably did not have quite the same advantages as those students who completed the entire EdD in full-time residence. Some of these students were probably employed full- or part-time while working on their doctorates full-time. Students spending three or more semesters in full-time study were likely to be motivated to complete the EdD in a reasonably short period of time, could arrange their employment to coincide with their doctoral study, and could maintain a satisfactory subsistence level. This group of students, however, would be more likely to have pressures and demands of outside situations which could easily divert their attention from doctoral study. In addition, they would not have as much time to devote to developing important relationships with the faculty and other students, or becoming involved in professional activities.

Those students who never enrolled on a full-time basis may possibly have enrolled in a few classes to find out more about the degree or their field of study, and quickly decided the doctorate was an unrealistic goal. Further, they were probably unwilling or unable to make the necessary financial and personal sacrifices to pursue

doctoral study full-time. Since this variable was statistically significant, it is reasonable to conclude that full-time versus part-time study was an important variable in explaining the completion or noncompletion of the EdD.

Place of Residence During Doctoral Study. During most of the course work for the doctorate a large proportion of graduates, 66.67%, lived within 20 miles of the university while only one fourth of the nongraduates lived that close. Of the nongraduates responding, 47.54% lived between 21 and 60 miles from the university as compared to only 15.90% of the graduates. There were 16.39% of the nongraduates who lived more than 81 miles from the university while only 9.74% of the graduates lived this distance. Living several miles from the university compounds the stresses of doctoral study. Many times students must travel to and from classes over substandard roads that are particularly dangerous during the winter months. The time involved in traveling to the university to (a) attend class, (b) use library services, (c) use computer services, and (d) consult with faculty and students on various assignments, is a great inconvience to those students living greater distances from the campus. In most instances living greater distances from the university indicates part-time, as opposed to full-time, status. Part-time status alone creates the problems discussed in the previous section of students not (a) being able to spend enough time on campus to develop important relationships with faculty members and students or (b) becoming integrated into the intellectual community of the university.

The distance the student lived from the university while working on the dissertation did not seem to be important. Approximately 50% of both graduates and nongraduates lived 81 or more miles from the university during the dissertation stage of the EdD. Once the dissertation stage is reached, students do not have to travel to the university as frequently as when they were enrolled in courses. Many may have access to local libraries, typists, computers, and other support services needed to conduct the research, particularly if they are employed with institutions of higher learning. Once the prospectus has been approved, the student only needs to travel to the university periodically to meet with his/her advisor. Based on the statistical significance of the analysis, it is reasonable to conclude that the distance the student lived from the university during course work was an important variable in explaining the completion or noncompletion of the EdD, while the distance from the university during the dissertation stage is not.

Physical Health. A very high percentage of both graduates and nongraduates, 96.37% and 95% respectively, reported being in "good" or "excellent" physical health. Since doctoral programs require a great amount of stamina, particularly for those individuals working while going to school, it seems reasonable that individuals with poor physical health would not likely begin pursuing a doctorate. In addition, those who incur physical problems during doctoral study may be forced to terminate their programs before completion. Since this variable was not statistically significant, it is reasonable to

conclude that physical health was not an important variable in explaining the completion or noncompletion of the EdD.

Emotional/Psychological Health. Most doctoral students, 82.99% of the graduates and 81.96% of the nongraduates, indicated they were in either "good" or "excellent" mental health while pursuing the doctorate. It was interesting to note, however, that approximately 20% of both graduates and nongraduates considered themselves to be of "fair," "poor," or "very bad" mental health. To successfully complete the doctoral requirements, a student has to be capable of making satisfactory adjustments in several roles. They must have the ability to withstand pressures and frustrations not only as graduate students, but also as spouses, parents, and employees. Since this variable was not statistically significant, it is reasonable to conclude that emotional/psychological health was not an important variable in explaining the completion or noncompletion of the EdD.

Number of Hours Employed. When compared to graduates, a much higher percentage of nongraduates were employed more than 40 hours per week during course work. Of the nongraduates, 76.67% were employed more than 40 hours per week, whereas only 39.18% of the graduates were employed that extensively during doctoral study. Inversely, 27.84% of the graduates were not employed at all during the course work of their doctorate as compared to only 6.67% of the nongraduates.

Students who remain employed during doctoral study, particularly those whose jobs require 40 or more hours per week, are in a constant

dilemma of trying to simultaneously balance the demands of employment and doctoral study. It is frequently a draining experience to give priorities to the time and tasks required by both. Also, when an individual cannot devote full-time to doctoral study, it takes a longer time to complete the degree. The length of time it takes to complete the EdD becomes a deterrent to many people who simply lack the motivation, perseverance, stamina, and financial reserves to withstand the strain for a long period of time.

The number of hours a student is employed obviously directly relates to the amount of time he or she can spend in full-time study. Therefore, the same adverse effects of part-time study, as discussed in that previous section, apply to the individual who must work several hours per week.

For those students reaching the dissertation stage, the number of hours they were employed per week did not affect whether they completed their dissertations. While writing the dissertation, 53.19% of the graduates and 53.85% of the nongraduates were employed for 40 or more hours per week. Perhaps those students who reached the dissertation stage were more committed to finishing the degree than those who dropped out earlier. Those who worked full-time probably had learned how to balance the demands of being a student and an employee while completing the course work, and the same organizational ability was an asset in completing the dissertation. Based on the statistical significance of the analysis it is reasonable to conclude that the number of hours students were employed during the

course work of the doctorate was an important variable in explaining the completion or noncompletion of the EdD, while employment during the dissertation was not.

Time Period In Which Major Field of Study Was Chosen. Students were more likely to complete the EdD degree if they decided on their major field of study prior to receiving their undergraduate degree. Of the graduates responding, 17.95% decided on their field of study while enrolled in either high school or undergraduate college programs. Comparatively, only 4.92% of the nongraduates decided on their fields at this time. Although the early choice of a major field was the statistically significant difference between completion and noncompletion of the EdD degree, it was interesting to note that the majority of individuals in this study, 70.49% of the nongraduates and 57.94% of the graduates, decided on their field of study either during their master's program or before beginning the doctorate. In addition, almost 15% of the graduates and 8.20% of the nongraduates did not decide on their field of study until they were engaged in doctoral programs. Individuals who decide early in their careers that they are going to major in a particular field and/or complete a doctorate have set long-range goals for themselves. As they progress through their educational experiences, they can emphasize specific subject-matter areas and focus on specific skills that are assets in completing the doctorate. These individuals are likely to see the value of acquiring good oral and written skills, research methods, statistical concepts, and computer skills. Conversely, the

individual who decides later in his or her career to pursue a doctorate may not have acquired the necessary skills to do so. Since this variable was statistically significant, it is reasonable to conclude that the time period in which an individual chose his/her major field of study was an important variable in explaining the completion or noncompletion of the EdD.

Level of Commitment to Career at Beginning of Doctoral Study. Approximately the same percentage of graduates and nongraduates, 56.77% and 55.74% respectively, were definitely committed to their field when they enrolled in doctoral study and had a preference for a specific type of job in that field. A larger proportion of graduates, however, had a greater commitment to their field than the nongraduates, as was reflected in the other two response categories. Of the nongraduates responding, 26.23% began doctoral study just to see if it would lead to a desirable career whereas only 13.02% of the graduates enrolled for the same reason. More graduates than nongraduates, 30.21% and 18.03% respectively, were committed to the field but did not have a preference for a specific type of job in that field. It is likely that those individuals already employed in a specific field prior to beginning doctoral study would be particularly motivated to complete the degree so that they could advance in their current jobs, or have more ability to change jobs within their fields. This variable coincides with the previous one relative to when the individual chose their major field of study. The noncompletion of the EdD correlated with a lack of definite commitment to either the field or a

specific career. Since this variable was statistically significant, it is reasonable to conclude that the level of commitment to a field of study and/or a specific career at the beginning of the doctoral program was an important variable in explaining the completion or noncompletion of the EdD.

Motive For Beginning Doctoral Study. At least 40% of both graduates and nongraduates attached "great" importance to the following reasons for beginning doctoral programs: "to acquire new knowledge," 66.80%; "the possibility of new positions," 64.84%; "to become a better practitioner," 51.95%; "to remain well qualified in their field," 48.83%; "to specialize in a given field," 44.92%; and "to increase earning capacity," 43.92%. Graduates, more so than nongraduates, pursued the doctorate for reasons of "prestige" and "to acquire new knowledge."

Since this variable was not statistically significant, it is reasonable to conclude that the student's motive for beginning doctoral study was not an important variable in explaining the completion or noncompletion of the EdD.

Source of Financial Subsidy. The main source of financial subsidy for both graduates and nongraduates was their own full-time employment. When compared to graduates, however, a greater percentage of nongraduates had to rely on their own full-time employment as their primary source of income. A greater percentage of graduates, 26.02%, relied on assistantships as their primary source of income as opposed to only 4.92% of the nongraduates. Income from the spouse

was considered the primary source of income for 17.35% of the graduates, but for only 4.92% of the nongraduates.

The fact that more graduates held assistantships and had the financial support of their spouses was probably an indication of strong motivation and long-range planning on the part of the individual to meet the financial requirements of the doctoral program. Also, this fact could indicate that the more talented students receive assistantships. If this is the case, the students who hold assistantships may be more likely to graduate than those who do not hold assistantships. The fact that a lower percentage of graduates, as compared to nongraduates, had to rely on full-time employment as their primary source of income, indicates their willingness to devote themselves to full-time study. Conversely, approximately three fourths of the nongraduates had to rely on their own full-time employment for financial subsidy. Therefore, they were either unwilling or unable to make the commitment to undertake doctoral study on a full-time basis. Further, these individuals were probably under a great deal of stress trying to satisfy the demands of both doctoral study and full-time employment. Since this variable was statistically significant, it is reasonable to conclude that the primary source of financial subsidy during doctoral study is an important variable in explaining the completion or noncompletion of the EdD.

The secondary source of financial subsidy was the spouse's income for 27.85% of both graduates and nongraduates. For a very

small number of students, between 10.50% and 13%, assistantships, savings, their own full-time employment, and their own part-time employment were the secondary sources of income. For this secondary source of income graduates had more assistantships and used their savings to a greater extent than nongraduates. Nongraduates, more so than graduates, relied on spouse's income. The fact that graduates had more assistantships and were willing to use their savings to pursue their doctorates is another indication of a strong commitment to finish the EdD. Although these facts are interesting and lend some insight into the financial subsidy of doctoral students, the variable was not statistically significant. Therefore, it is reasonable to conclude that the secondary source of financial subsidy during the doctoral program was not an important variable in explaining the completion or noncompletion of the EdD.

Of those students having three sources of income, 51.85% of the nongraduates relied on savings as their third source of financial subsidy as compared to only 27.07% of the graduates. A larger percentage of nongraduates used loans as their third source of income. Although this variable was not statistically significant, it seems that students tend to terminate their doctoral programs when they have to resort to savings and loans in order to maintain a certain level of income. Since this variable was not statistically significant, it is reasonable to conclude that the the third source of financial subsidy during the doctoral program was not an important variable in explaining the completion or noncompletion of the EdD.

Financial Subsistence Level. In general, graduates were living at a higher subsistence level than nongraduates. Almost 70% of the graduates were meeting expenses and had some money left over for emergencies, while only 52.54% of the nongraduates were living at this subsistence level. Although they were meeting necessary expenses, 47.45% of the nongraduates either did not have any money left for emergencies or were in debt, whereas only 30.98% of the graduates were in this category. Most students terminated their doctoral programs when their financial reserves were depleted and they found themselves either in debt or with no financial security. Those individuals in the same financial situation who chose to finish the degree were probably very motivated to finish the doctorate, for a variety of possible reasons, and viewed the doctorate as being beneficial in the long run. They were willing to sacrifice financial security for the present in order to achieve their ultimate goals of completing the EdD. These same students probably had a positive perception of the value of the doctorate, both in material and non-material rewards. Since this variable was statistically significant, it is reasonable to conclude that the financial subsistence level was an important variable in explaining the completion or noncompletion of the EdD.

Relationship With the Faculty. The majority of graduates in this study, 76.29%, liked the faculty in their departments, discussed academic ideas with them, and was stimulated by them. Of the non-graduates, 42.62% felt the same way. While 26.23% of the nongradu-

ates were generally neutral toward the faculty, only 3.09% of the graduates rated themselves in that same category. It is very important for faculty members to develop personal interests in doctoral students; serve as mentors; provide guidance, encouragement, and support; and be genuinely interested in them as individuals. Faculty members should help doctoral students, particularly at the beginning of their programs, to become an integral part of the academic community of their department and university. As the student nears completion of the EdD, faculty members should be willing to help the student become established in the profession. This can be accomplished by helping the student publish articles, make presentations at professional meetings, and acquire jobs. Since this variable was statistically significant, it is reasonable to conclude that the relationship the student experienced with the faculty in his/her department was an important variable in explaining the completion or noncompletion of the EdD.

Relationship With Other Students. Of the nongraduates responding, 62.30% liked the students in their departments, discussed academic ideas with them, and were stimulated by them, while 32.79% were generally neutral toward them. In comparison, 70.21% of the graduates really liked the students in their departments and interacted well with them, as opposed to only 11.17% who were generally neutral toward them. It is important for doctoral students to have a positive relationship with other students in the department. Unlike relationships with other students in undergraduate programs, doctoral

students, particularly the part-time ones, do not have as much opportunity to develop informal student networks, support groups, study groups, social groups, and information systems. This lack of opportunity makes the quality of student interactions within departments even more important. Another aspect of student interaction that could influence the attrition rate of doctoral students is the personality types of individuals enrolled in the program. The personality traits of students that pursue a particular field of study may be indicative of the type of people who are in a certain field or profession. Therefore, if doctoral students find themselves in programs in which other students are uncaring, insensitive, and highly competitive, students may drop out of programs because of unhappiness within the department, or because they don't want to be in a profession with similar types of people. Since this variable was statistically significant, it is reasonable to conclude that relationships with other students within the department was an important variable in explaining the completion or noncompletion of the EdD.

Relationship With Doctoral Committee. At least 50% of the graduates rated their doctoral committees as "great" on all seven items on the questionnaire. The majority of graduates felt their committees were: "willing to give good, positive suggestions"; "reasonable and amendable to their ideas"; "active and accessible"; "interested in them as a person"; "helpful and encouraging"; "timely with feedback"; and "reasonable in their expectations." Less than 32% of the nongraduates, however, rated their committees as "great" on the same

variables. Although all seven items were statistically significant when graduates and nongraduates were compared, there were three items that received the lowest ratings from nongraduates. Specifically, nongraduates felt that their doctoral committees were not: interested in them as a person, 42.11%; timely with feedback, 42.11%; or helpful and encouraging, 36.84%. It is interesting to note that the items that received the lowest rating from nongraduates were those of a personal nature rather than task oriented items. In general, graduates perceived a more positive relationship with their doctoral committee than did nongraduates. Since this variable was statistically significant, it is reasonable to conclude that the relationship a doctoral student experienced with his/her doctoral committee was an important variable in explaining the completion or noncompletion of the EdD.

Relationship With the Faculty Advisor. Of the graduates responding to this study, 41.67% believed that their faculty advisor was a super person who had gone to great lengths to be helpful and encouraging, while only 11.67% of the nongraduates felt this way. Inversely, 28.33% of the nongraduates felt their faculty advisor did not really care about them and should have helped them more, compared to only 5.21% of the graduates. An additional 10% of the nongraduates felt that their advisors were not supportive or helpful at all, at times were even against the student, and the student had to do everything without any help from the advisor. Only 7.29% of the graduates rated their advisors this low. Therefore, 38.33% of the

nongraduates perceived their faculty advisors very negatively. For these students who had such poor relationships with their faculty advisors, becoming integrated into the academic community would be very difficult. In many cases, the faculty advisor is one of the first people with whom the student comes in contact once a decision is made to pursue doctoral study. If advisors present a negative, uncaring, impersonal attitude toward individuals, potential doctoral recipients may decide not to enroll in a program of study, or may terminate a program in the beginning stages. Since this variable was statistically significant, it is reasonable to conclude that the relationship a student experienced with his/her faculty advisor was an important variable in explaining the completion or noncompletion of the EdD.

Relationship With Dissertation Chair. Of all the nongraduates responding, 72.88% terminated their doctoral study before they reached the dissertation stage or had a dissertation chair. Of the remaining 27.11% of the nongraduates who did have a dissertation chair, approximately 43% felt their chair was not supportive or helpful, did not care about them, and did very little to help them. Only 3.39% of the nongraduates who had a dissertation chair felt they were super people who exceeded their expectations in being helpful and encouraging. In contrasting viewpoints, 46.15% of the graduates felt their dissertation chairs were super people who were extremely helpful and encouraging; only 10.26% felt they were not supportive or helpful, would not help them, and were even against them. Undertak-

ing a doctoral dissertation is a very frightening, stressful situation for many individuals. For most students this is the first real experience with research and writing a major document. The dissertation is perhaps one of the most critical times, if not the most important, when students need guidance, encouragement, direction, and support from their chairpersons. Since this variable was statistically significant, it is reasonable to conclude that the relationship the student experienced with the chairperson of his/her dissertation was an important variable in explaining the completion or noncompletion of the EdD.

Perception of the Quality and Value of Course Work. At least 50% of the graduates felt that "to a great extent" their course work was "intellectually stimulating," "appropriate to their professional goals," and "provided a great deal of self-direction and freedom." Less than 30% of the nongraduates felt that, "to a great extent," their course work was "intellectually stimulating," "appropriate to their professional goals," "provided adequate opportunities for practical experiences," or "provided a great deal of self-direction and freedom." While 14.75% of the nongraduates felt the course work was irrelevant "to a great extent," only 4.64% of the graduates felt the same way.

Graduates were more satisfied with the quality and value of course work and perceived it to be more applicable to their needs than did the dropouts. This is not surprising, as it seems logical that students who were not satisfied with the course work would

become discouraged for a variety of reasons. Individuals may decide that their particular degree program is not offering them the background for what they ultimately want to do professionally. Many individuals, themselves experienced professionals, may perceive some classes as purely "busy work" with little or no benefit for practical application. Those individuals who did complete the EdD most likely had clearer professional goals than the nongraduates, and may have constructed their degree programs to include more flexible and applicable classes, internships, and independent studies. Conversely, since nongraduates had less crystalized career goals than graduates, they would be less likely to see the value, practicality, and applicability of course work. Some faculty members may not have the background, knowledge, attitude, desire, or time to adequately prepare and present courses. Students who experience low quality classes, particularly at the beginning of their doctoral programs, may quickly develop a negative view of the program and choose to terminate the doctorate altogether, change fields, or transfer to another institution. Since this variable was statistically significant, it is reasonable to conclude that students' perception of the quality and value of course work was an important variable in explaining the completion or noncompletion of the EdD.

Orientation to Academic Expectations of the Department. Graduates, more so than nongraduates, felt they had received an adequate orientation to the academic expecations of the department by department faculty members. Of the graduates responding, 32.82% felt their

orientation had been "extremely complete," whereas only 8.20% of the nongraduates felt the same way. To the contrary, 22.95% of the nongraduates felt information provided by the faculty was "almost nonexistent," as compared to only 4.10% of the graduates. Those individuals who completed the EdD may have had a more accurate perception of the academic requirements of doctoral study upon entering their programs than nongraduates. Since more graduates than nongraduates had assistantships, they probably were more aware of the requirements because of their involvement with the department. It is logical that faculty members would spend more time with the graduate assistants in explaining expectations than with doctoral students who do not have assistantships. Because of the varying backgrounds, needs, and perceptions of entering doctoral students, faculty members should be willing to take the time to counsel with individuals and present an accurate description of what will be required. Faculty members should not assume that individuals entering doctoral programs know what is expected of them or what the department has to offer. Helping individuals become oriented to doctoral study is an important factor in retaining doctoral students.

While 22.91% of the graduates perceived the orientation information provided by West Virginia University sources on academic expectations to be "extremely complete," only 8.20% of the nongraduates felt the same way. Conversely, 44.07% of the nongraduates felt information was "almost nonexistent" as compared to 18.44% of the graduates. Since the graduate school at West Virginia University was

dismantled in 1982, the academic standards and requirements for doctorates are prescribed by the individual colleges and academic units. Therefore, it is logical that the departments should be the primary source for disseminating this information to students. It is important, however, for doctoral students to become integrated into the academic community of the total university. This is very difficult, especially for part-time students. Nongraduates perceived a lack of communication or concern from the institution since a large percentage felt their information from the institution was almost nonexistent.

Since both variables were statistically significant, it is reasonable to conclude that orientation information about the academic requirements of the doctorate, provided by both the academic department and West Virginia University sources, were important variables in explaining the completion or noncompletion of the EdD.

Orientation to Doctoral Study in General. This area of orientation included information on support services available to doctoral students and their rights and privileges at West Virginia University. Some of the items included in this information would be: identification cards, how to gain access to the computer, parking procedures, research monies that might be available, how to use university facilities for both academic and recreational purposes, special rates on athletic and cultural events, housing, and discipline/suspension.

A larger number of nongraduates, 41.67%, as compared to 25.14% the graduates, felt that such information provided by their

department was "almost nonexistent." Conversely, 24.02% of the graduates and only 10% of the nongraduates felt the information was "considerably complete."

In their rating of information supplied by West Virginia University sources, 56.90% of the nongraduates as compared to 33.33% of the graduates, said it was "almost nonexistent." On the other end of the scale, 18.97% of the graduates rated information as "considerably complete," whereas only 10.34% of the nongraduates felt the same way.

There is a large percentage of doctoral students, both graduates and nongraduates who are not receiving adequate information about support services and their rights and privileges as doctoral students at West Virginia University. Although the percentage of nongraduates is higher, proportionatly high percentages of graduates also are not receiving this information. Doctoral students are usually expected to "seek and find" this type of information as needs arise. Several faculty members feel that doctoral students are mature adults who are capable of "navigating the system" on their own. Further, some administrators and faculty members in colleges and departments perceive the dissemination of this type of information to be the responsibility of the Division of Student Affairs at West Virginia University, and the Division of Student Affairs perceives that this information is being addressed within the departments. Regardless of the reasons, this is one area that is not being adequately addressed by either academic departments or the institution.

Since these variables were statistically significant, it is reasonable to conclude that orientation information provided by both the academic department and West Virginia University, were important variables in explaining the completion or noncompletion of the EdD.

Difficulty Incurred or Perceived With the Dissertation. Students were asked to rate "to what extent" different phases of the dissertation were difficult. Nongraduates who had not reached the dissertation stage were asked to rate the items based on their perception of the difficulty they might incur. More than 65% of both graduates and nongraduates felt they had, or would have, difficulty in selecting a topic and developing the prospectus. Over 90% of both graduates and nongraduates felt they would not have a great deal of difficulty in organizing everything that needed to be done for the dissertation. The items with which the nongraduates had more difficulty, or thought they would have more difficulty, were: securing approval of the prospectus, securing adequate support from the dissertation chair, applying research skills, writing the dissertation, locating necessary resources, and the oral defense.

It is interesting to note that relationships with the faculty, as discussed in previous sections, are again very important as individuals approach and continue the dissertation process. A significant number of nongraduates perceived a lack of support from their committee in approving the prospectus, and difficulty acquiring adequate support from their dissertation chair. In some instances faculty members may be providing what they consider an adequate amount

of support; the dissatisfaction on the part of the student may arise from their own insecurities and lack of self-esteem or self-confidence. Nongraduates appear to either have a real fear of undertaking the dissertation, or actually lack the necessary skills to do so. The fact remains that doctoral students differ in their skills and self-confidence. Faculty members should be more sensitive to the needs of students and the differences between them. Some promising individuals could be successful EdD recipients with a little more encouragement, personal support, assistance, and attention from faculty members. Since this variable was statistically significant, it is reasonable to conclude that difficulty experienced or perceived during the dissertation was an important variable in explaining the completion or noncompletion of the EdD.

Students' Perception of the Value of the Doctorate. Almost one half of the graduates felt that although doctoral study was expensive, it would be an excellent economic investment for the future. Only 16.95% of the nongraduates, however, felt that the doctorate would be this valuable for them. Conversely, approximately one half of the nongraduates viewed the doctorate as being much too expensive and that in the long run the material and nonmaterial rewards would not compensate for it. Comparatively, only 5.21% of the graduates felt this way.

It is quite possible that the individuals who felt the doctorate would be of great benefit to them were assured of a salary increase in their present jobs, or had an indication that they could advance

to better positions within their fields as a result of obtaining the EdD. For those individuals who may have been changing fields, they may have thought different employment in a new field would be more advantageous. Those individuals pursuing the doctorate for prestige probably felt that if they did not receive a great economic benefit from the degree, they would be compensated in other ways. Nongraduates simply did not perceive the doctorate as having that many advantages for them. Perhaps they began doctoral study somewhat highly motivated, but because they really did not place a high value on holding an EdD degree, easily dropped out of the program when they realized the requirements.

Since this variable was statistically significant, it is reasonable to conclude that the student's perception of the value of the doctorate was an important variable in explaining the completion or noncompletion of the EdD.

Student's Perception of Doctoral Study When First Enrolled. A very high percentage of both graduates and nongraduates felt they accurately perceived the amount of intellectual capability required for the doctorate and the amount of money involved. While a large number of students had an accurate perception of the amount of time required, 32.68% did not. It was interesting to note that approximately one half of the students, both graduates and nongraduates, did not realize the amount of stress and anxiety that was involved in pursuing the doctorate. Faculty members need to be aware of the stress and anxiety that doctoral students experience. If this anxie-

ty level could be reduced in some students, perhaps more of them would finish the degree. Further, faculty members need to talk about these factors when counseling with doctoral students.

Since this variable was not statistically significant, it is reasonable to conclude that the student's perception of doctoral study when first enrolled was not an important variable in explaining the completion or noncompletion of the EdD.

Selected variables were tested to determine if factors inherent to specific departments correlated with the completion or noncompletion of EdD degrees. The following conclusions were drawn relative to the Curriculum and Instruction and Education Administration Departments.

Comparison of the Relationship With Departmental Faculty in the Curriculum and Instruction and Education Administration Departments. The majority of both graduates and nongraduates, 85.25%, in the Curriculum and Instruction Department felt positive about their relationships with the faculty. The students "liked and accepted the faculty, discussed ideas with them, was stimulated by them, but did not always like them as a total body." Only 14.75% of all students in that department held a negative view of the faculty. These students either "tried to avoid the faculty and felt somewhat negative toward them, or was generally neutral toward them."

In the Education Administration Department, a significantly higher number of graduates than nongraduates held a positive view of their relationships with the faculty. While 87.50% of the graduates

"liked and accepted the faculty, discussed ideas with them, was stimulated by them, but did not always like them as a total body," only 61.54% of the nongraduates held the same view. Conversely, 38.46% of the nongraduates in the department "generally avoided the faculty, was somewhat negatively inclined toward them, or was generally neutral," whereas only 12.50% of the graduates felt this way.

The relationships the student experienced with the faculty in his/her department was statistically significant for the Education Administration Department, but was not for the Curriculum and Instruction Department. Students who dropped out of doctoral programs in the Education Administration Department were more likely to have negative relationships with the faculty than the students who completed the EdD degree. Students in Curriculum and Instruction, as compared to Education Administration, viewed the faculty more positively. Further, in the Curriculum and Instruction Department there was no relationship between noncompletion of the EdD and student-faculty relationships.

Therefore, it is reasonable to conclude that in the Education Administration Department, but not in the Curriculum and Instruction Department, the difference in student-faculty relationships was an important variable in explaining the completion or noncompletion of the EdD.

Comparison of the Relationship With Other Students in the Curriculum and Instruction and Education Administration Departments. It was surprising to find that 100% of the nongraduates in

the Curriculum and Instruction Department rated their relationships with the other students in their department as very positive. All of the nongraduates indicated they "liked and accepted the other students, discussed ideas with them, was stimulated by them, but did not always like them as a body." While 72.92% of the graduates felt the same way about the other students in the department, 27.08% "avoided the other students, felt somewhat negatively inclined toward them, or was generally neutral toward them."

In the Education Administration Department 84.44% of the graduates and 53.85% of the nongraduates felt they had a positive relationship with the other students in their department. Only 15.56% of the graduates, as compared to 46.15% of the nongraduates, rated their relationships with other students as being negative.

When the two departments are compared, more nongraduates in the Curriculum and Instruction Department had positive relationships with the other students in their department than did nongraduates in the Education Administration Department. The opposite was true in comparing the graduates in the two departments. A slightly higher percentage of graduates in the Education Administration Department had more positive relationships with the other students in their department than did graduates in the Curriculum and Instruction Department.

In Education Administration, students who completed the EdD degree were more likely than nongraduates to have positive relationship with other students in the department. This relationship does not hold true in Curriculum and Instruction. In fact, the

relationship may be just the opposite. In that department a higher percentage of nongraduates, rather than graduates, is more likely to have positive relationships with other students.

This variable was statistically significant for Education Administration, but not for Curriculum and Instruction. Therefore, it is reasonable to conclude that in the Education Administration Department, but not in the Curriculum and Instruction Department, the difference in relationships students experienced with other students was an important variable in explaining the completion or noncompletion of the EdD.

Comparison of the Relationship With the Doctoral Committee in the Curriculum and Instruction and Education Administration Departments. Responses from students in the Curriculum and Instruction Department were significant on four of the seven variables of doctoral committees. Those characteristics of doctoral committees that were significant were: "reasonable and amendable to ideas and suggestions," "interested in the student as a person," "helpful and encouraging," and "reasonable in their expectations."

In the Education Administration Department, five of the seven variables were statistically significant. Those variables were: "reasonable and amendable to ideas and suggestions," "active and accessible," "helpful and encouraging," "timely with feedback," and "reasonable in their expectations."

Since the majority of variables were statistically significant for both departments, it is reasonable to conclude that the

relationship the students experienced with doctoral committees in both the Curriculum and Instruction and Education Administration Departments was an important variable in explaining the completion or noncompletion of the EdD.

Comparison of the Relationship With Faculty Advisor in the Curriculum and Instruction and Education Administration Departments. The majority of the graduates, 76%, in the Curriculum and Instruction Department rated their relationship with their faculty advisor on the positive end of the scale, as compared to only 41.67% of the non-graduates. In comparison, 58.33% of the nongraduates rated the faculty advisor more negatively, whereas only 24% of the graduates felt the same way.

In the Education Administration Department 81.25% of the graduates felt their relationship with their faculty advisor was a positive one, as compared to only 36% of the nongraduates. Over one half, or 64%, of the nongraduates rated their relationships more negatively whereas only 18.75% of the graduates felt the same way.

Since this variable was statistically significant in both departments, it is reasonable to conclude that the relationship the student experienced with his/her faculty advisor in both the Curriculum and Instruction and Education Administration Departments was an important variable in explaining the completion or noncompletion of the EdD.

Comparison of the Relationship With Dissertation Committee Chairperson in the Curriculum and Instruction and Education Administration Departments. In the Curriculum and Instruction Department,

80% of the graduates rated their relationship with their dissertation chairs as very positive, as compared to only 25% of the nongraduates. On the other hand, 75% of the nongraduates rated their chairs negatively, whereas only 20% of the graduates rated them the same way.

Of the Education Administration graduates, 85.42% rated their dissertation chairs very highly as did only 16.67% of the nongraduates. The majority of the nongraduates, 83.33% rated their dissertation chairs negatively while only 14.58% of the graduates felt the same way.

Since this variable was statistically significant in both departments, it is reasonable to conclude that the relationship the student experienced with his/her dissertation chair in both the Curriculum and Instruction and Education Administration Departments was an important variable in explaining the completion or noncompletion of the EdD.

Comparison of the Perception of the Quality and Value of Course Work in the Curriculum and Instruction and Education Administration Departments. Out of five variables describing the quality and value of course work, only one was significant in the Curriculum and Instruction Department. That variable was the "self-direction and freedom provided by the course work."

In the Education Administration Department, however, four of the five variables were significant. Those were: "intellectually stimulating," "irrelevant," "provided practical experiences," and "provided self-direction and freedom."

The majority of the variables in the Curriculum and Instruction Department were not significant, whereas in the Education Administration Department they were. Therefore, it is reasonable to conclude that the student's perception of the quality and value of the course work was an important variable in explaining the completion or non-completion of the EdD degree in the Education Administration Department. The perception students had about the "self-direction and freedom" aspect of course work was the only important variable in explaining the completion or noncompletion of the EdD degree in the Curriculum and Instruction Department.

Comparison of the Orientation to the Academic Requirements of the Department in the Curriculum and Instruction and Education Administration Departments. Approximately 50% of both graduates and non-graduates in the Curriculum and Instruction Department felt they had received either an "extremely" or "considerably" complete amount of information from the faculty concerning academic expectations of the department. The other 50% believed they had received information that was only "moderately complete," "rather incomplete," or "almost nonexistent."

In the Education Administration Department, 77.08% of the graduates rated their orientation on academic expectations very favorably, while only 23.08% of the nongraduates felt the same way. Of the nongraduates, 76.92% did not rate their orientation information positively, as compared to only 22.92% of the graduates.

This variable was statistically significant for the Education Administration Department but not for the Curriculum and Instruction Department. Therefore, it is reasonable to conclude that the orientation the student received relative to academic expectations of the department was an important variable in explaining the completion or noncompletion of the EdD in the Education Administration Department but not in the Curriculum and Instruction Department.

Comparison of the Orientation to Doctoral Study in General in the Curriculum and Instruction and Education Administration Departments. In rating the orientation they received relative to support services and the rights and privileges of doctoral students, 32.73% of the total students, both graduates and nongraduates, in the Curriculum and Instruction Department rated that information very favorably as opposed to 67.27% percent who felt the information was not complete.

In the Education Administration Department, only 4% of the nongraduates felt their information was either extremely or moderately complete as compared to 96% who did not. In comparison, 51.22% of the graduates felt their information was extremely or considerably complete while 48.78% indicated just the opposite. This data might indicate that those students who are being oriented, are being oriented well, while others are receiving very little information. Perhaps the discrepancy lies in the content and amount of information given to students by individual faculty members. Also, those students who develop closer relationships with faculty members may learn

more through their informal interactions than through a more formal orientation program. Therefore, those students who are closer to faculty members may perceive their orientation as being more complete than students who did not develop close relationships.

This variable was statistically significant for the Education Administration Department but not for the Curriculum and Instruction Department. Therefore, it is reasonable to conclude that the orientation students received concerning support services and their rights and privileges as doctoral students was an important variable in explaining the completion or noncompletion of the EdD degree in the Education Administration Department but not in the Curriculum and Instruction Department.

Recommendations

1. The College of Human Resources and Education should consider developing a more accurate system for initially coding doctoral students into college and university data bases and a system for keeping their current status accurate. In addition, it would be important to make personal contacts with doctoral students on a regular basis so that their status could be determined.

2. The recruitment and retention of minority students should be an important consideration in the enrollment management system of the College.

3. The results strongly suggest that EdD recipients are more likely to be enrolled as full-time students rather than part-time, and are employeed fewer hours than the unsuccessful students. In

addition, the primary source of financial subsidy and the financial subsistence level are important factors in the completion or noncompletion of the EdD. Therefore, attempts should be made to improve financial assistance for doctoral students. Some possibilities include scholarships, assistantships, campus employment, stipends, low-interest or interest-free loans, grants, and research money for dissertations.

4. Faculty members need to be aware of the importance of developing genuine and positive personal relationships with the students and assisting them to become integrated into the departmental community and profession. Perhaps seminars for faculty members on interpersonal relationships would strengthen skills in this area.

5. Graduate faculty within departments may want to consider a method by which effective interaction between themselves and doctoral students could take place. This dialogue should strive to promote and encourage an increased sensitivity to student needs by faculty; conversely, the students would have a more clear understanding of faculty expectations. Students could be encouraged to work with faculty members on publishing articles, presenting papers, or other professional activities.

6. Since personal relationships with faculty advisors are important, advisors should strengthen relationships with advisees, and show a genuine interest and concern for the student. Faculty advisors should consider making periodic personal contacts with

advisees, particularly if they have not attended classes, been on campus, or had any communication with them for a semester.

7. Many times students must select advisors, doctoral committees, and dissertation chairs without really knowing the faculty members, and sometimes faculty advisors are randomly assigned to students. Since relationships with faculty members are very important, it may be useful for each department to develop ways in which a doctoral student could be matched with major professors having compatible personalities, values, interests, and objectives.

8. Departments could consider identifying those professors who enjoy and appreciate the counseling role, are genuinely interested in students as individuals, and are competent to direct doctoral dissertations. Those professors could be given added advisory responsibilities and diminished teaching assignments, similar to those who have combined administrative and teaching duties.

9. Doctoral committees and, in particular, dissertation chairpersons need to be aware that they do influence the successful completion of the EdD. In working with doctoral students, committees and chairpersons should be: willing to give good, positive suggestions; reasonable and amendable to the student's ideas and suggestions; active and accessible; interested in the student as a person; helpful and encouraging; timely with feedback; and reasonable in their expectations.

10. Dissertation chairs and committees need to understand that students do have fears about the dissertation that prohibit them from

completing the EdD. Dissertation chairs and committee members should make additional efforts to provide a great deal of guidance, encouragement, and support to students at the dissertation stage of the EdD.

11. Since relationships with other students in the department are important, each individual department should consider an organized system which would stimulate a positive interaction among doctoral students through support groups, study groups, and/or social situations. One method would be to introduce a more experienced student in the department to one just beginning a program. Students could also be encouraged to work together on projects or papers.

12. Faculty members and administrators should constantly evaluate and modify existing courses, course content, and teaching methods. Since graduates perceived their course work as being intellectually stimulating, appropriate to their professional goals, self-directing with a great deal of freedom, and relevant, perhaps course evaluations should be designed to include evaluations of these criteria. Perhaps more emphasis should be given to soliciting evaluations from the nongraduates, in addition to the graduates.

13. The College of Human Resources and Education may want to consider a stronger counseling program and selection process for students who wish to pursue the EdD degree. In addition to the academic standards already being utilized by the college for admission into an EdD program, faculty members should counsel with prospective candidates about the sociological and psychological deterrents to

completing the degree. Faculty members should inform students that their chances of completing the EdD degree in the College of Human Resources and Education at West Virginia University are greater if they (a) grew up outside of West Virginia, (b) live within 20 miles of the University during course work, (c) are definitely commited to their field, (d) decided on their field of study before they completed their undergraduate degree, and (e) perceive the doctorate as providing material or nonmaterial rewards.

14. It is recommended that graduate advisors make the results of this study available to prospective doctoral candidates so that they may evaluate their own qualifications and optimize their chances for success.

15. Improved dissemination of information on academic requirements, support services, and the rights and privileges of doctoral students needs to be considered by both the college and the university. Perhaps departmental teams could be developed to provide in-depth information concerning such things as financial aid, housing, job placement, program requirements, identification cards, library and computer privileges, parking regulations, and privileges for athletic and cultural events. Another approach would be for individual faculty advisors to provide specified information to potential doctoral students on an individual basis. If this method is used, a standardized approach to orientation and the content of information should be agreed upon and followed by the faculty. The Division of Student Affairs at West Virginia University should also consider

providing more information and services to doctoral students. Regardless of the method, the College of Human Resources and Education and the Division of Student Affairs should work together to avoid duplicating efforts.

16. Faculty members and administrators in the College of Human Resources and Education need to be cognizant of the fact that a significant number of nongraduates hold negative attitudes toward faculty members, faculty advisors, dissertation chairs, dissertation committees, and other students. If faculty members are sensitive to this fact as they work with students, they may be more keenly aware of negative barriers developing.

Recommendations for Further Study

1. Departments within the College of Human Resources and Education, particularly Education Administration, may want to undertake a study to determine if some of the negative attitudes or barriers as viewed by doctoral students, primarily nongraduates, are present from an objective point of view. Specifically, the content of the study should focus on the quality of relationships that exist among doctoral students and faculty, faculty advisors, dissertation committee chairs, dissertation committees, and other students. The Curriculum and Instruction Department should conduct the same study, paying particular attention to student relationships with faculty advisors, dissertation chairs, dissertation committees, and other students.

2. Since individuals who grew up in West Virginia had a higher noncompletion rate than those who grew up out-of-state, it would be

interesting to determine if: (a) Appalachian value systems and environments have a negative impact on decisions to pursue doctorates, the perceptions of the value of the doctorate, the aspiration level of individuals, and the individual's self-confidence to complete a doctorate; (b) the educational systems in Appalachia prepare students for an advanced degree experience; and (c) the educational level of the students' parents who resided in Appalachia, and the value they had of advanced degrees, influence individuals to pursue advanced degrees or complete them once they are enrolled.

3. A faculty evaluation of the doctoral students in the College of Human Resources and Education could be conducted in order to identify possible discrepancies between faculty and student expectations, in both academic and interpersonal areas. Further, a study of this nature could identify the faculty's perception of the needs of doctoral students to determine if they are congruent with the actual needs expressed by students.

4. Departments in The College of Human Resources and Education, and specifically the Education Administration Department, may want to consider a study of the perception graduates and, more importantly, nongraduates have of the value and quality of specific courses so that faculty members will have current data to use in program evaluations.

5. A study should be conducted to measure the degree to which mentor relationships exist between faculty members and doctoral students in departments in the College of Human Resources and Education.

The results of a study of this nature would provide additional information on how both doctoral students and faculty members perceive their relationships.

6. Studies on the interpersonal aspects of doctoral degrees would add a great deal of information to the limited knowledge that now exists. Some possible areas of exploration would be: the formation and group dynamics of dissertation committees, the interaction that takes place between advisor and advisee in selecting the dissertation topic, and personality factors in advisor-advisee relationships.

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APPENDIX A

Questionnaire for Graduates

(Official Use)
(2-5)

DOCTORAL STUDENT STUDY

I. BACKGROUND INFORMATION

INSTRUCTIONS: Please place the number of your response in the answer column to the right (unless otherwise indicated).

1. What was your major field of study as a doctoral student? (ENTER NUMBER) 1. _____ (6)

   1. COUNSELING AND GUIDANCE/REHABILITATION COUNSELING
   2. CURRICULUM AND INSTRUCTION
   3. EDUCATION ADMINISTRATION
   4. EDUCATIONAL PSYCHOLOGY
   5. HEALTH EDUCATION
   6. READING
   7. SPECIAL EDUCATION
   8. TECHNOLOGY EDUCATION
   9. OTHER (SPECIFY) _____

2. Are You: (ENTER NUMBER) 2. _____ (7)

   1. BLACK OR AFRO-AMERICAN
   2. WHITE
   3. ASIAN PACIFIC
   4. OTHER (SPECIFY) _____

3. Are You: (ENTER NUMBER) 3. _____ (8)

   1. MALE
   2. FEMALE

4. What was your martial status during the total period you were working on your doctorate? (ENTER NUMBER) 4. _____ (9)

   1. MARRIED DURING THE ENTIRE PERIOD
   2. MARRIED AFTER STARTED THE DOCTORAL PROGRAM
   3. MARRIED, BUT WAS WIDOWED, SEPARATED OR DIVORCED DURING THIS PERIOD
   4. SINGLE DURING THE ENTIRE PERIOD
   5. OTHER (SPECIFY) _____

5. During most of the time you were working on your doctorate what was the total number of children in your household for whom you were responsible? (ENTER NUMBER) 5. _____ (10)

   1. NONE
   2. ONE
   3. TWO
   4. THREE
   5. FOUR OR MORE

6. What year did you begin taking classes (post-masters) that you consider to be part of your doctoral study? (ENTER YEAR) 6. _____ (11-14)

7. What was your age when you began doctoral study? (ENTER AGE) 7. _____ (15-16)

8. What year did you complete or end your doctoral study? (ENTER YEAR) (If you are currently working on your doctorate, please go to question 10) 8. _____ (17-20)

9. What was your age when you completed or ended your doctoral study? (ENTER AGE) (If you are currently working on your doctorate, please go to question 10.) 9. _____ (21-22)

10. How many semesters were you a full-time doctoral student? (Taking a minimum of 9 hours or equivalent work per semester) (ENTER NUMBER) — 10. _____ (23)

1. I WAS NEVER A FULL-TIME STUDENT
2. ONE SEMESTER
3. TWO SEMESTERS
4. THREE OR FOUR SEMESTERS
5. FIVE OR MORE SEMESTERS
6. ALL MY DOCTORAL STUDY

11. How many miles (one-way) did you live from your main campus during most of your course work (11.1) and while working on the dissertation (11.2)? (ENTER NUMBER) — 11.1 _____ (24) (Course Work); 11.2 _____ (25) (Dissertation)

1. 0-20 MILES
2. 21-40 MILES
3. 41-60 MILES
4. 61-80 MILES
5. 81 MILES OR MORE
6. I DID NOT REACH THE DISSERTATION STAGE

12. How would you rate your overall physical health during your doctoral program at WVU? (ENTER NUMBER) — 12. _____ (26)

1. VERY BAD
2. POOR
3. FAIR
4. GOOD
5. EXCELLENT
6. HANDICAPPED

13. How would you rate your overall emotional health during your doctoral study at WVU? (ENTER NUMBER) — 13. _____ (27)

1. VERY BAD
2. POOR
3. FAIR
4. GOOD
5. EXCELLENT

14. How many hours per week were you employed during most of your course work (14.1) and dissertation (14.2)? (exclude assistantships) (ENTER NUMBERS) — 14.1 _____ (28) (Course Work); 14.2 _____ (29) (Dissertation)

1. NONE
2. 20 OR LESS HOURS PER WEEK
3. 21 TO 39 HOURS PER WEEK
4. 40 OR MORE HOURS PER WEEK

II. FINANCES

15. Which of the following best describes your financial situation during your last term of enrollment of doctoral study? (ENTER NUMBER) — 15. _____ (30)

1. FINANCES WERE NEVER REALLY A CONCERN.
2. I HAD ENOUGH MONEY FOR NECESSARY EXPENSES AND ENOUGH LEFT OVER FOR EMERGENCIES.
3. I HAD ENOUGH MONEY FOR NECESSARY EXPENSES BUT NOTHING LEFT OVER FOR EMERGENCIES.
4. I HAD ENOUGH MONEY FOR NECESSARY EXPENSES BUT I WAS IN DEBT.
5. I DID NOT HAVE ENOUGH MONEY FOR NECESSARY EXPENSES BUT I WAS NOT IN DEBT.
6. I DID NOT HAVE ENOUGH MONEY FOR NECESSARY EXPENSES AND I WAS IN DEBT.

16. Listed below are some sources of income. Select up to three major sources of assistance you received during your doctoral study. (ENTER NUMBERS)

16.1 _____ (31-32) (Primary Source)
16.2 _____ (33-34) (Secondary Source)
16.3 _____ (35-36) (Third Source)

1. VETERANS' BENEFITS
2. SCHOLARSHIP, GRANT, FELLOWSHIP
3. ASSISTANTSHIP
4. SAVINGS
5. LEAVE WITH PAY
6. GIFTS/INHERITANCES
7. SPOUSE'S INCOME
8. YOUR OWN FULL-TIME EMPLOYMENT
9. YOUR OWN PART-TIME EMPLOYMENT
10. LOANS
11. INVESTMENT INCOME
12. OTHER (SPECIFY) _____

17. Which of the following best describes your personal feelings? (ENTER NUMBER) 17. _____ (37)

1. ALTHOUGH DOCTORAL STUDY IS EXPENSIVE, IN THE LONG RUN IT SHOULD BE AN EXCELLENT ECONOMIC INVESTMENT.
2. DOCTORAL STUDY IS EXPENSIVE AND IT IS A DOUBTFUL ECONOMIC INVESTMENT BUT THE NON-MATERIAL REWARDS COMPENSATE FOR THE FINANCIAL PROBLEMS.
3. DOCTORAL STUDY IS MUCH TOO EXPENSIVE AND I DOUBT THAT EVEN IN THE LONG RUN THE MATERIAL AND NON-MATERIAL REWARDS WILL COMPENSATE FOR IT.

III. FAMILY BACKGROUND

18. Please indicate the highest level of formal education obtained by your father (18.1) and mother (18.2) (the adults with whom you resided during most of your formative years) (ENTER NUMBERS)

18.1 _____ (38) (Father)
18.2 _____ (39) (Mother)

1. DID NOT COMPLETE ELEMENTARY SCHOOL
2. COMPLETED ELEMENTARY SCHOOL (6th grade)
3. COMPLETED SECONDARY SCHOOL (12th grade)
4. ATTENDED COLLEGE
5. COMPLETED COLLEGE (4-YEAR DEGREE PROGRAM)
6. COMPLETED MASTER'S DEGREE
7. COMPLETED ED.D./PH.D.
8. OTHER (SPECIFY) _____

19. How many of your siblings (those with whom you resided during most of your formative years) have either attended college or completed a college degree? (ENTER NUMBERS) 19. _____ (40-41)

20. What was your primary place of residence during most of your formative years? (ENTER NUMBER) 20. _____ (42-43)

1. WEST VIRGINIA FARM
2. WEST VIRGINIA RURAL NON-FARM AND POPULATIONS UP TO 2,500
3. WEST VIRGINIA TOWN (At least 2,500 but under 10,000)
4. WEST VIRGINIA CITY (10,000-50,000)
5. WEST VIRGINIA URBAN (Over 50,000)
6. OUT-OF-STATE FARM
7. OUT-OF-STATE RURAL NON-FARM AND POPULATIONS UP TO 2,500
8. OUT-OF-STATE TOWN (At least 2,500 but under 10,000)
9. OUT-OF-STATE CITY (10,000-50,000)
10. OUT-OF-STATE URBAN/METROPOLITAN (Over 50,000)
11. OTHER (SPECIFY) _____

21. Please indicate to what extent the following individuals may have influenced your decision to enter doctoral study. (ENTER NUMBERS)

	Individuals	Influence				
		None	Some	Great		
1.	Parents	1	2	3	21.1 _____	(44)
2.	Grandparents	1	2	3	21.2 _____	(45)
3.	Siblings	1	2	3	21.3 _____	(46)
4.	Other relatives	1	2	3	21.4 _____	(47)
5.	Spouse	1	2	3	21.5 _____	(48)

22. Please indicate to what extent the following individuals provided personal support (NOT financial) to you throughout your doctoral study. (ENTER NUMBERS)

	Individuals	Influence				
		None	Some	Great		
1.	Parents	1	2	3	22.1 _____	(49)
2.	Grandparents	1	2	3	22.2 _____	(50)
3.	Siblings	1	2	3	22.3 _____	(51)
4.	Other relatives	1	2	3	22.4 _____	(52)
5.	Spouse	1	2	3	22.5 _____	(53)

IV CAREER PLANS

23. When did you first seriously consider going into the major field of study of your doctoral work? (ENTER NUMBER) 23. _____ (54)

1. BEFORE OR DURING HIGH SCHOOL
2. DURING THE FIRST TWO YEARS OF COLLEGE
3. DURING THE JUNIOR OR SENIOR YEAR OF COLLEGE
4. BEFORE MASTER'S STUDY
5. DURING MASTER'S STUDY
6. BEFORE DOCTORAL STUDY
7. DURING DOCTORAL STUDY
8. OTHER (SPECIFY) _____

24. Please think back to the time when you first definitely decided to enroll in your program of doctoral study. Select the statement which comes closest to describing your career plans at that time. (ENTER NUMBER) 24. _____ (55)

1. DEFINITELY COMMITTED TO THE FIELD AND A PREFERENCE FOR A SPECIFIC TYPE OF JOB IN THAT FIELD.
2. DEFINITELY COMMITTED TO THE FIELD, BUT NO PREFERENCE FOR A SPECIFIC TYPE OF JOB IN THAT FIELD.
3. TRYING OUT THE FIELD TO SEE IF IT MIGHT LEAD TO A DESIRABLE CAREER.

25. Listed below are some factors which might have influenced your decision to enter a doctoral program. Please indicate the extent to which each of these factors may have influenced your decision. (ENTER NUMBERS)

	Possible Factors	Influence: None	Some	Great	
1.	POSSIBILITY OF NEW POSITIONS	1	2	3	25.1 _____ (56)
2.	PRESTIGE	1	2	3	25.2 _____ (57)
3.	TO IMPROVE RESEARCH SKILLS	1	2	3	25.3 _____ (58)
4.	TO ACQUIRE NEW KNOWLEDGE	1	2	3	25.4 _____ (59)
5.	TO INCREASE EARNING CAPACITY	1	2	3	25.5 _____ (60)
6.	TO SPECIALIZE IN A GIVEN FIELD	1	2	3	25.6 _____ (61)
7.	DESIRE TO WORK WITH COLLEGE STUDENTS	1	2	3	25.7 _____ (62)
8.	TO ADVANCE IN CURRENT JOB	1	2	3	25.8 _____ (63)
9.	TO REMAIN WELL QUALIFIED IN MY FIELD	1	2	3	25.9 _____ (64)
10.	TO BECOME A BETTER PRACTITIONER	1	2	3	25.10 _____ (65)
11.	DIVERSION FROM NORMAL ROUTINES	1	2	3	25.11 _____ (66)
12.	DIVERSION FROM PERSONAL PROBLEMS	1	2	3	25.12 _____ (67)
13.	OTHER (SPECIFY) _____	1	2	3	25.13 _____ (68)

V. STUDY IN YOUR GRADUATE DEPARTMENT

26. During your doctoral study how would you characterize your interaction with faculty (26.1) and students (26.2) in your department? (ENTER NUMBERS)

26.1 _____ (69) (Faculty)

26.2 _____ (70) (Students)

1. I LIKED THEM, DISCUSSED ACADEMIC IDEAS WITH THEM, AND WAS STIMULATED BY THEM.
2. I ACCEPTED THEM, DISCUSSED IDEAS WITH THEM, BUT DID NOT PARTICULARLY LIKE THEM AS A BODY.
3. I GENERALLY AVOIDED THEM EXCEPT WHEN NECESSARY, AND ON OCCASION FELT SOMEWHAT NEGATIVELY INCLINED TOWARD MOST OF THEM.
4. I WAS GENERALLY NEUTRAL TOWARD THEM.

27. Approximately what percentage of the faculty members in your department did you know well enough to "drop in" their offices without a formal appointment? (ENTER NUMBER)

27. _____ (71)

1. NONE
2. ABOUT 25% OR LESS
3. BETWEEN 25-50%
4. BETWEEN 50-75%
5. MORE THAN 75%

28. Which of the following statements comes nearest to describing your feelings about both your most recent faculty advisor (28.1) and most recent dissertation committee chairperson (28.2)? (ENTER NUMBERS)

28.1 _____ (72) (Faculty Advisor)

28.2 _____ (73) (Dissertation Chair)

1. S/HE WAS NOT AT ALL SUPPORTIVE OR HELPFUL. AT TIMES I FELT THAT S/HE WAS AGAINST ME AND THAT I HAD TO DO EVERYTHING WITHOUT ANY HELP FROM HIM/HER.
2. AT TIMES I FELT THAT S/HE DIDN'T REALLY CARE ABOUT ME. S/HE WAS NOT REALLY AGAINST ME, BUT S/HE SHOULD HAVE HELPED ME MORE.
3. S/HE SEEMED FAIR AND IMPARTIAL. S/HE WOULD HELP ME WHEN I APPROACHED HIM/HER, BUT SELDOM GAVE SUPPORT OR HELP OF HIS/HER OWN INITIATIVE.
4. S/HE WAS VERY HELPFUL. I FELT THAT S/HE WAS ON MY SIDE AND WANTED ME TO BE SUCCESSFUL.
5. S/HE WAS A SUPER PERSON. S/HE WENT FAR BEYOND WHAT I HAD EXPECTED HIM/HER TO DO IN HELPING AND ENCOURAGING ME.
6. I WAS NOT FAR ENOUGH ALONG IN THE PROGRAM TO HAVE A DISSERTATION COMMITTEE CHAIR.

29. Please indicate to what extent your doctoral committee, in general, was: (ENTER NUMBERS) (If you did not have a committee formed, please go to question 30).

		To No Extent	To Some Extent	To a Great Extent	
1.	WILLING TO GIVE GOOD, POSITIVE SUGGESTIONS	1	2	3	29.1 _____ (74)
2.	REASONABLE AND AMENDABLE TO MY IDEAS AND SUGGESTIONS	1	2	3	29.2 _____ (75)
3.	ACTIVE AND ACCESSIBLE	1	2	3	29.3 _____ (76)
4.	INTERESTED IN ME AS A PERSON	1	2	3	29.4 _____ (77)
5.	HELPFUL AND ENCOURAGING	1	2	3	29.5 _____ (78)
6.	TIMELY WITH FEEDBACK	1	2	3	29.6 _____ (79)
7.	REASONABLE IN THEIR EXPECTATIONS	1	2	3	29.7 _____ (80)

30. Please indicate the extent to which you experienced difficulty during the dissertation stage of your doctorate. If you did not reach the dissertation stage, please respond with the level of difficulty you would anticipate having. (ENTER NUMBERS)

		Difficulties			
		None	Some	Great	
1.	SELECTING A TOPIC	1	2	3	30.1 _____ (6)
2.	DEVELOPING THE PROSPECTUS	1	2	3	30.2 _____ (7)
3.	SECURING PROSPECTUS APPROVAL	1	2	3	30.3 _____ (8)
4.	SECURING ADEQUATE SUPPORT FROM DISSERTATION CHAIR	1	2	3	30.4 _____ (9)
5.	APPLYING RESEARCH SKILLS	1	2	3	30.5 _____ (10)
6.	CONDUCTING THE LITERATURE REVIEW	1	2	3	30.6 _____ (11)
7.	WRITING THE DISSERTATION	1	2	3	30.7 _____ (12)
8.	ORGANIZING EVERYTHING THAT NEEDED TO BE DONE	1	2	3	30.8 _____ (13)
9.	LOCATING RESOURCES (computer, typist, statistician)	1	2	3	30.9 _____ (14)
10.	ORAL DEFENSE	1	2	3	30.10 _____ (15)

31. Prior to beginning your doctoral program, how complete was the information given you by faculty members in your department (31.1), or other WVU sources (31.2), on academic expectations such as course requirements, assistantships, degree requirements, selecting committees, and dissertation requirements? (ENTER NUMBERS)

1. EXTREMELY COMPLETE
2. CONSIDERABLY COMPLETE
3. MODERATELY COMPLETE
4. RATHER INCOMPLETE
5. ALMOST NON-EXISTENT

31.1 _____ (16) (Department)

31.2 _____ (17) (WVU Source)

32. Prior to beginning your doctoral program, how complete was the information given you by faculty members in your department (32.1), or other WVU sources (32.2), on support services such as housing, loans, health care, and the rights and privileges of graduate students? (ENTER NUMBERS)

1. EXTREMELY COMPLETE
2. CONSIDERABLY COMPLETE
3. MODERATELY COMPLETE
4. RATHER INCOMPLETE
5. ALMOST NON-EXISTENT

32.1 _____ (18) (Department)

32.2 _____ (19) (WVU Source)

33. Please describe to what extent your course work, in general, met your needs and expectations. (ENTER NUMBERS)

		To No Extent	To Some Extent	To A Great Extent	
1.	INTELLECTUALLY STIMULATING	1	2	3	33.1 _____ (20)
2.	IRRELEVANT	1	2	3	33.2 _____ (21)
3.	APPROPRIATE TO MY PROFESSIONAL GOALS	1	2	3	33.3 _____ (22)
4.	PROVIDE ADEQUATE OPPORTUNITIES FOR PRACTICAL EXPERIENCES	1	2	3	33.4 _____ (23)
5.	PROVIDED A GREAT DEAL OF SELF-DIRECTION AND FREEDOM	1	2	3	33.5 _____ (24)

34. We would like to know whether students have an accurate perception of the demands of doctoral study before enrolling in a program. Please indicate whether you feel you had correct perceptions on the following items. (ENTER NUMBERS)

		Accurate Perception		
		YES	NO	
1.	INTELLECTUAL CAPABILITY REQUIRED	1	2	34.1 _____ (25)
2.	AMOUNT OF MONEY REQUIRED	1	2	34.2 _____ (26)
3.	AMOUNT OF TIME REQUIRED	1	2	34.3 _____ (27)
4.	AMOUNT OF STRESS/ANXIETY	1	2	34.4 _____ (28)

35. Please list what you consider to be the three most important academic and/or personal factors responsible for doctoral candidates successfully completing their doctoral program in the College of Human Resources and Education.

1. _____ _____ (29-30)
2. _____ _____ (31-32)
3. _____ _____ (33-34)

36. Please list what you believe to be the three most important academic and/or personal reasons that a doctoral student (with whom you have personal knowledge) has not completed his/her program in the College of Human Resources and Education.

1. _____ _____ (35-36)
2. _____ _____ (37-38)
3. _____ _____ (39-40)

APPENDIX B

Questionnaire for Nongraduates

(Official Use)
(2-5)

DOCTORAL STUDENT STUDY

I. BACKGROUND INFORMATION

INSTRUCTIONS: Please place the number of your response in the answer column to the right (unless otherwise indicated).

1. What was your major field of study as a doctoral student? (ENTER NUMBER) 1. _____ (6)

   1. COUNSELING AND GUIDANCE/REHABILITATION COUNSELING
   2. CURRICULUM AND INSTRUCTION
   3. EDUCATION ADMINISTRATION
   4. EDUCATIONAL PSYCHOLOGY
   5. HEALTH EDUCATION
   6. READING
   7. SPECIAL EDUCATION
   8. TECHNOLOGY EDUCATION
   9. OTHER (SPECIFY) _____

2. Are You: (ENTER NUMBER) 2. _____ (7)

   1. BLACK OR AFRO-AMERICAN
   2. WHITE
   3. ASIAN PACIFIC
   4. OTHER (SPECIFY) _____

3. Are You: (ENTER NUMBER) 3. _____ (8)

   1. MALE
   2. FEMALE

4. What was your martial status during the total period you were working on your doctorate? (ENTER NUMBER) 4. _____ (9)

   1. MARRIED DURING THE ENTIRE PERIOD
   2. MARRIED AFTER STARTED THE DOCTORAL PROGRAM
   3. MARRIED, BUT WAS WIDOWED, SEPARATED OR DIVORCED DURING THIS PERIOD
   4. SINGLE DURING THE ENTIRE PERIOD
   5. OTHER (SPECIFY) _____

5. During most of the time you were working on your doctorate what was the total number of children in your household for whom you were responsible? (ENTER NUMBER) 5. _____ (10)

   1. NONE
   2. ONE
   3. TWO
   4. THREE
   5. FOUR OR MORE

6. What year did you begin taking classes (post-masters) that you consider to be part of your doctoral study? (ENTER YEAR) 6. _____ (11-14)

7. What was your age when you began doctoral study? (ENTER AGE) 7. _____ (15-16)

8. What year did you complete or end your doctoral study? (ENTER YEAR) (If you are currently working on your doctorate, please go to question 10) 8. _____ (17-20)

9. What was your age when you completed or ended your doctoral study? (ENTER AGE) (If you are currently working on your doctorate, please go to question 10.) 9. _____ (21-22)

10. How many semesters were you a full-time doctoral student? (Taking a minimum of 9 hours or equivalent work per semester) (ENTER NUMBER) 10. _____ (23)

1. I WAS NEVER A FULL-TIME STUDENT
2. ONE SEMESTER
3. TWO SEMESTERS
4. THREE OR FOUR SEMESTERS
5. FIVE OR MORE SEMESTERS
6. ALL MY DOCTORAL STUDY

11. How many miles (one-way) did you live from your main campus during most of your course work (11.1) and while working on the dissertation (11.2)? (ENTER NUMBER) 11.1 _____ (24) (Course Work)

11.2 _____ (25) (Dissertation)

1. 0-20 MILES
2. 21-40 MILES
3. 41-60 MILES
4. 61-80 MILES
5. 81 MILES OR MORE
6. I DID NOT REACH THE DISSERTATION STAGE

12. How would you rate your overall physical health during your doctoral program at WVU? (ENTER NUMBER) 12. _____ (26)

1. VERY BAD
2. POOR
3. FAIR
4. GOOD
5. EXCELLENT
6. HANDICAPPED

13. How would you rate your overall emotional health during your doctoral study at WVU? (ENTER NUMBER) 13. _____ (27)

1. VERY BAD
2. POOR
3. FAIR
4. GOOD
5. EXCELLENT

14. How many hours per week were you employed during most of your course work (14.1) and dissertation (14.2)? (exclude assistantships) (ENTER NUMBERS) 14.1 _____ (28) (Course Work)

1. NONE
2. 20 OR LESS HOURS PER WEEK
3. 21 TO 39 HOURS PER WEEK
4. 40 OR MORE HOURS PER WEEK

14.2 _____ (29) (Dissertation)

II. FINANCES

15. Which of the following best describes your financial situation during your last term of enrollment of doctoral study? (ENTER NUMBER) 15. _____ (30)

1. FINANCES WERE NEVER REALLY A CONCERN.
2. I HAD ENOUGH MONEY FOR NECESSARY EXPENSES AND ENOUGH LEFT OVER FOR EMERGENCIES.
3. I HAD ENOUGH MONEY FOR NECESSARY EXPENSES BUT NOTHING LEFT OVER FOR EMERGENCIES.
4. I HAD ENOUGH MONEY FOR NECESSARY EXPENSES BUT I WAS IN DEBT.
5. I DID NOT HAVE ENOUGH MONEY FOR NECESSARY EXPENSES BUT I WAS NOT IN DEBT.
6. I DID NOT HAVE ENOUGH MONEY FOR NECESSARY EXPENSES AND I WAS IN DEBT.

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16. Listed below are some sources of income. Select up to three major sources of assistance you received during your doctoral study. (ENTER NUMBERS)

16.1 _____ (31-32) (Primary Source)

16.2 _____ (33-34) (Secondary Source)

16.3 _____ (35-36) (Third Source)

1. VETERANS' BENEFITS
2. SCHOLARSHIP, GRANT, FELLOWSHIP
3. ASSISTANTSHIP
4. SAVINGS
5. LEAVE WITH PAY
6. GIFTS/INHERITANCES
7. SPOUSE'S INCOME
8. YOUR OWN FULL-TIME EMPLOYMENT
9. YOUR OWN PART-TIME EMPLOYMENT
10. LOANS
11. INVESTMENT INCOME
12. OTHER (SPECIFY) _____

17. Which of the following best describes your personal feelings? (ENTER NUMBER) 17. _____ (37)

1. ALTHOUGH DOCTORAL STUDY IS EXPENSIVE, IN THE LONG RUN IT SHOULD BE AN EXCELLENT ECONOMIC INVESTMENT.
2. DOCTORAL STUDY IS EXPENSIVE AND IT IS A DOUBTFUL ECONOMIC INVESTMENT BUT THE NON-MATERIAL REWARDS COMPENSATE FOR THE FINANCIAL PROBLEMS.
3. DOCTORAL STUDY IS MUCH TOO EXPENSIVE AND I DOUBT THAT EVEN IN THE LONG RUN THE MATERIAL AND NON-MATERIAL REWARDS WILL COMPENSATE FOR IT.

III. FAMILY BACKGROUND

18. Please indicate the highest level of formal education obtained by your father (18.1) and mother (18.2) (the adults with whom you resided during most of your formative years) (ENTER NUMBERS)

18.1 _____ (38) (Father)

18.2 _____ (39) (Mother)

1. DID NOT COMPLETE ELEMENTARY SCHOOL
2. COMPLETED ELEMENTARY SCHOOL (6th grade)
3. COMPLETED SECONDARY SCHOOL (12th grade)
4. ATTENDED COLLEGE
5. COMPLETED COLLEGE (4-YEAR DEGREE PROGRAM)
6. COMPLETED MASTER'S DEGREE
7. COMPLETED ED.D./PH.D.
8. OTHER (SPECIFY) _____

19. How many of your siblings (those with whom you resided during most of your formative years) have either attended college or completed a college degree? (ENTER NUMBERS) 19. _____ (40-41)

20. What was your primary place of residence during most of your formative years? (ENTER NUMBER) 20. _____ (42-43)

1. WEST VIRGINIA FARM
2. WEST VIRGINIA RURAL NON-FARM AND POPULATIONS UP TO 2,500
3. WEST VIRGINIA TOWN (At least 2,500 but under 10,000)
4. WEST VIRGINIA CITY (10,000-50,000)
5. WEST VIRGINIA URBAN (Over 50,000)
6. OUT-OF-STATE FARM
7. OUT-OF-STATE RURAL NON-FARM AND POPULATIONS UP TO 2,500
8. OUT-OF-STATE TOWN (At least 2,500 but under 10,000)
9. OUT-OF-STATE CITY (10,000-50,000)
10. OUT-OF-STATE URBAN/METROPOLITAN (Over 50,000)
11. OTHER (SPECIFY) _____

21. Please indicate to what extent the following individuals may have influenced your decision to enter doctoral study. (ENTER NUMBERS)

	Individuals	Influence				
		None	Some	Great		
1.	Parents	1	2	3	21.1 _____	(44)
2.	Grandparents	1	2	3	21.2 _____	(45)
3.	Siblings	1	2	3	21.3 _____	(46)
4.	Other relatives	1	2	3	21.4 _____	(47)
5.	Spouse	1	2	3	21.5 _____	(48)

22. Please indicate to what extent the following individuals provided personal support (NOT financial) to you throughout your doctoral study. (ENTER NUMBERS)

	Individuals	Influence				
		None	Some	Great		
1.	Parents	1	2	3	22.1 _____	(49)
2.	Grandparents	1	2	3	22.2 _____	(50)
3.	Siblings	1	2	3	22.3 _____	(51)
4.	Other relatives	1	2	3	22.4 _____	(52)
5.	Spouse	1	2	3	22.5 _____	(53)

IV CAREER PLANS

23. When did you first seriously consider going into the major field of study of your doctoral work? (ENTER NUMBER) 23. _____ (54)

1. BEFORE OR DURING HIGH SCHOOL
2. DURING THE FIRST TWO YEARS OF COLLEGE
3. DURING THE JUNIOR OR SENIOR YEAR OF COLLEGE
4. BEFORE MASTER'S STUDY
5. DURING MASTER'S STUDY
6. BEFORE DOCTORAL STUDY
7. DURING DOCTORAL STUDY
8. OTHER (SPECIFY) _____

24. Please think back to the time when you first definitely decided to enroll in your program of doctoral study. Select the statement which comes closest to describing your career plans at that time. (ENTER NUMBER) 24. _____ (55)

1. DEFINITELY COMMITTED TO THE FIELD AND A PREFERENCE FOR A SPECIFIC TYPE OF JOB IN THAT FIELD.
2. DEFINITELY COMMITTED TO THE FIELD, BUT NO PREFERENCE FOR A SPECIFIC TYPE OF JOB IN THAT FIELD.
3. TRYING OUT THE FIELD TO SEE IF IT MIGHT LEAD TO A DESIRABLE CAREER.

25. Listed below are some factors which might have influenced your decision to enter a doctoral program. Please indicate the extent to which each of these factors may have influenced your decision. (ENTER NUMBERS)

	Possible Factors	Influence				
		None	Some	Great		
1.	POSSIBILITY OF NEW POSITIONS	1	2	3	25.1 _____	(56)
2.	PRESTIGE	1	2	3	25.2 _____	(57)
3.	TO IMPROVE RESEARCH SKILLS	1	2	3	25.3 _____	(58)
4.	TO ACQUIRE NEW KNOWLEDGE	1	2	3	25.4 _____	(59)
5.	TO INCREASE EARNING CAPACITY	1	2	3	25.5 _____	(60)
6.	TO SPECIALIZE IN A GIVEN FIELD	1	2	3	25.6 _____	(61)
7.	DESIRE TO WORK WITH COLLEGE STUDENTS	1	2	3	25.7 _____	(62)
8.	TO ADVANCE IN CURRENT JOB	1	2	3	25.8 _____	(63)
9.	TO REMAIN WELL QUALIFIED IN MY FIELD	1	2	3	25.9 _____	(64)
10.	TO BECOME A BETTER PRACTITIONER	1	2	3	25.10 _____	(65)
11.	DIVERSION FROM NORMAL ROUTINES	1	2	3	25.11 _____	(66)
12.	DIVERSION FROM PERSONAL PROBLEMS	1	2	3	25.12 _____	(67)
13.	OTHER (SPECIFY) _____	1	2	3	25.13 _____	(68)

V. STUDY IN YOUR GRADUATE DEPARTMENT

26. During your doctoral study how would you characterize your interaction with faculty (26.1) and students (26.2) in your department? (ENTER NUMBERS)

26.1 _____ (69) (Faculty)

26.2 _____ (70) (Students)

1. I LIKED THEM, DISCUSSED ACADEMIC IDEAS WITH THEM, AND WAS STIMULATED BY THEM.
2. I ACCEPTED THEM, DISCUSSED IDEAS WITH THEM, BUT DID NOT PARTICULARLY LIKE THEM AS A BODY.
3. I GENERALLY AVOIDED THEM EXCEPT WHEN NECESSARY, AND ON OCCASION FELT SOMEWHAT NEGATIVELY INCLINED TOWARD MOST OF THEM.
4. I WAS GENERALLY NEUTRAL TOWARD THEM.

27. Approximately what percentage of the faculty members in your department did you know well enough to "drop in" their offices without a formal appointment? (ENTER NUMBER)

27. _____ (71)

1. NONE
2. ABOUT 25% OR LESS
3. BETWEEN 25-50%
4. BETWEEN 50-75%
5. MORE THAN 75%

28. Which of the following statements comes nearest to describing your feelings about both your most recent faculty advisor (28.1) and most recent dissertation committee chairperson (28.2)? (ENTER NUMBERS)

28.1 _____ (72) (Faculty Advisor)

28.2 _____ (73) (Dissertation Chair)

1. S/HE WAS NOT AT ALL SUPPORTIVE OR HELPFUL. AT TIMES I FELT THAT S/HE WAS AGAINST ME AND THAT I HAD TO DO EVERYTHING WITHOUT ANY HELP FROM HIM/HER.
2. AT TIMES I FELT THAT S/HE DIDN'T REALLY CARE ABOUT ME. S/HE WAS NOT REALLY AGAINST ME, BUT S/HE SHOULD HAVE HELPED ME MORE.
3. S/HE SEEMED FAIR AND IMPARTIAL. S/HE WOULD HELP ME WHEN I APPROACHED HIM/HER, BUT SELDOM GAVE SUPPORT OR HELP OF HIS/HER OWN INITIATIVE.
4. S/HE WAS VERY HELPFUL. I FELT THAT S/HE WAS ON MY SIDE AND WANTED ME TO BE SUCCESSFUL.
5. S/HE WAS A SUPER PERSON. S/HE WENT FAR BEYOND WHAT I HAD EXPECTED HIM/HER TO DO IN HELPING AND ENCOURAGING ME.
6. I WAS NOT FAR ENOUGH ALONG IN THE PROGRAM TO HAVE A DISSERTATION COMMITTEE CHAIR.

29. Please indicate to what extent your doctoral committee, in general, was: (ENTER NUMBERS) (If you did not have a committee formed, please go to question 30).

		To No Extent	To Some Extent	To a Great Extent	
1.	WILLING TO GIVE GOOD, POSITIVE SUGGESTIONS	1	2	3	29.1 _____ (74)
2.	REASONABLE AND AMENDABLE TO MY IDEAS AND SUGGESTIONS	1	2	3	29.2 _____ (75)
3.	ACTIVE AND ACCESSIBLE	1	2	3	29.3 _____ (76)
4.	INTERESTED IN ME AS A PERSON	1	2	3	29.4 _____ (77)
5.	HELPFUL AND ENCOURAGING	1	2	3	29.5 _____ (78)
6.	TIMELY WITH FEEDBACK	1	2	3	29.6 _____ (79)
7.	REASONABLE IN THEIR EXPECTATIONS	1	2	3	29.7 _____ (80)

30. Please indicate the extent to which you experienced difficulty during the dissertation stage of your doctorate. If you did not reach the dissertation stage, please respond with the level of difficulty you would anticipate having. (ENTER NUMBERS)

		Difficulties			
		None	Some	Great	
1.	SELECTING A TOPIC	1	2	3	30.1 _____ (6)
2.	DEVELOPING THE PROSPECTUS	1	2	3	30.2 _____ (7)
3.	SECURING PROSPECTUS APPROVAL	1	2	3	30.3 _____ (8)
4.	SECURING ADEQUATE SUPPORT FROM DISSERTATION CHAIR	1	2	3	30.4 _____ (9)
5.	APPLYING RESEARCH SKILLS	1	2	3	30.5 _____ (10)
6.	CONDUCTING THE LITERATURE REVIEW	1	2	3	30.6 _____ (11)
7.	WRITING THE DISSERTATION	1	2	3	30.7 _____ (12)
8.	ORGANIZING EVERYTHING THAT NEEDED TO BE DONE	1	2	3	30.8 _____ (13)
9.	LOCATING RESOURCES (computer, typist, statistician)	1	2	3	30.9 _____ (14)
10.	ORAL DEFENSE	1	2	3	30.10 _____ (15)

31. Prior to beginning your doctoral program, how complete was the information given you by faculty members in your department (31.1), or other WVU sources (31.2), on academic expectations such as course requirements, assistantships, degree requirements, selecting committees, and dissertation requirements? (ENTER NUMBERS)

1. EXTREMELY COMPLETE
2. CONSIDERABLY COMPLETE
3. MODERATELY COMPLETE
4. RATHER INCOMPLETE
5. ALMOST NON-EXISTENT

31.1 _____ (16) (Department)

31.2 _____ (17) (WVU Source)

32. Prior to beginning your doctoral program, how complete was the information given you by faculty members in your department (32.1), or other WVU sources (32.2), on support services such as housing, loans, health care, and the rights and privileges of graduate students? (ENTER NUMBERS)

1. EXTREMELY COMPLETE
2. CONSIDERABLY COMPLETE
3. MODERATELY COMPLETE
4. RATHER INCOMPLETE
5. ALMOST NON-EXISTENT

32.1 _____ (18) (Department)

32.2 _____ (19) (WVU Source)

33. Please describe to what extent your course work, in general, met your needs and expectations. (ENTER NUMBERS)

		To No Extent	To Some Extent	To A Great Extent	
1.	INTELLECTUALLY STIMULATING	1	2	3	33.1 _____ (20)
2.	IRRELEVANT	1	2	3	33.2 _____ (21)
3.	APPROPRIATE TO MY PROFESSIONAL GOALS	1	2	3	33.3 _____ (22)
4.	PROVIDE ADEQUATE OPPORTUNITIES FOR PRACTICAL EXPERIENCES	1	2	3	33.4 _____ (23)
5.	PROVIDED A GREAT DEAL OF SELF-DIRECTION AND FREEDOM	1	2	3	33.5 _____ (24)

34. We would like to know whether students have an accurate perception of the demands of doctoral study before enrolling in a program. Please indicate whether you feel you had correct perceptions on the following items. (ENTER NUMBERS)

		Accurate Perception		
		YES	NO	
1.	INTELLECTUAL CAPABILITY REQUIRED	1	2	34.1 _____ (25)
2.	AMOUNT OF MONEY REQUIRED	1	2	34.2 _____ (26)
3.	AMOUNT OF TIME REQUIRED	1	2	34.3 _____ (27)
4.	AMOUNT OF STRESS/ANXIETY	1	2	34.4 _____ (28)

35. Please list what you consider to be the three most important academic and/or personal factors responsible for doctoral candidates successfully completing their doctoral program in the College of Human Resources and Education.

1. _____ _____ (29-30)
2. _____ _____ (31-32)
3. _____ _____ (33-34)

36. Please list what you believe to be the three most important academic and/or personal reasons that a doctoral student (with whom you have personal knowledge) has not completed his/her program in the College of Human Resources and Education.

1. _____ _____ (35-36)
2. _____ _____ (37-38)
3. _____ _____ (39-40)

37. What is your present status regarding the doctorate? (ENTER NUMBER) 37. _____ (41)

1. A CONSIDERABLE AMOUNT OF WORK HAS BEEN DONE ON MY DISSERTATION BUT I NEED TO COMPLETE IT.
2. I NEED TO BEGIN THE DISSERTATION (SECURE TOPIC/PROSPECTUS APPROVAL FROM MY COMMITTEE).
3. I NEED TO PASS THE COMPREHENSIVE EXAMINATIONS AND COMPLETE THE DISSERTATION.
4. I NEED TO COMPLETE LESS THAN HALF OF THE COURSE WORK, THE COMPREHENSIVE EXAMS, AND THE DISSERTATION.
5. I NEED TO COMPLETE MORE THAN HALF OF THE COURSE WORK, COMPREHENSIVE EXAMS, AND DISSERTATION.
6. OTHER (SPECIFY) _____

38. Give the approximate number of semester hours (post-masters) you have accumulated toward your doctorate. (ENTER NUMBER OF HOURS) 38. _____ (42-44)

39. When do you expect to complete the doctorate? (ENTER NUMBER) 39. _____ (45)

1. I DO NOT PLAN TO RECEIVE THE DOCTORATE.
2. WITHIN THE NEXT YEAR.
3. WITHIN THE NEXT TWO YEARS.
4. WITHIN THE NEXT FIVE YEARS.

40. If you answered "2", "3", or "4" in the previous question (39), how definite are your plans to complete your doctoral program? (ENTER NUMBER) 40. _____ (46)

1. QUITE DEFINITE
2. FAIRLY DEFINITE BUT SUBJECT TO CHANGE
3. QUITE TENTATIVE

IF YOU ARE CURRENTLY WORKING ON YOUR DOCTORATE → STOP HERE ! ! ! ! !

IF YOU ARE NOT CURRENTLY WORKING ON YOUR DOCTORATE PLEASE CONTINUE.

41. Please indicate if any of the following academic reasons explain why you have not completed your doctoral program. (ENTER NUMBERS)

	Reason for Non-Completion		
	No	Yes	
1. DID NOT MAINTAIN A SATISFACTORY GRADE POINT AVERAGE OR PASS REQUIRED COURSES	1	2	41.1 _____ (47)
2. DID NOT PASS COMPREHENSIVE EXAMS	1	2	41.2 _____ (48)
3. DID NOT COMPLETE THE RESEARCH NECESSARY FOR THE DISSERTATION	1	2	41.3 _____ (49)
4. DID NOT WRITE THE DISSERTATION SATISFACTORILY FOR THE FACULTY	1	2	41.4 _____ (50)
5. WAS ADVISED I DID NOT HAVE ADEQUATE PREPARATION, PROPER PERSONAL QUALITIES, OR LACKED ABILITY TO OBTAIN DEGREE	1	2	41.5 _____ (51)
6. NO ACADEMIC REASON (I WAS IN GOOD STANDING WHEN I LEFT)	1	2	41.6 _____ (52)
7. OTHER (SPECIFY) _____	1	2	41.7 _____ (53)

42. Please indicate to what extent the following individual reasons may have influenced your non-completion or discontinuance of the doctorate (ENTER NUMBERS)

		Extent of Influence			
		To No Extent	To Some Extent	To A Great Extent	
1.	LACK OF SUFFICIENT FINANCES TO SUPPORT MYSELF/FAMILY	1	2	3	42.1 _____ (54)
2.	DID NOT THINK I HAD THE ABILITY	1	2	3	42.2 _____ (55)
3.	DECIDED TO CHANGE MAJOR FIELD OF STUDY	1	2	3	42.3 _____ (56)
4.	GOT ANOTHER JOB THAT DIDN'T REQUIRE THE DEGREE	1	2	3	42.4 _____ (57)
5.	WAS NOT GENERALLY HAPPY WITH THE LIFE OF BEING A STUDENT	1	2	3	42.5 _____ (58)
6.	FAMILY RESPONSIBILITIES	1	2	3	42.6 _____ (59)
7.	DEPARTMENT DID NOT MEASURE UP TO MY EXPECTATIONS	1	2	3	42.7 _____ (60)
8.	ILLNESS OR HEALTH OBSTACLES	1	2	3	42.8 _____ (61)
9.	MARTIAL DIFFICULTY	1	2	3	42.9 _____ (62)
10.	MOVED AWAY FROM THE UNIVERSITY, TRAVEL BECAME INCONVENIENT	1	2	3	42.10 _____ (63)
11.	JOB RESPONSIBILITIES WERE TOO DEMANDING	1	2	3	42.11 _____ (64)
12.	SUFFERED "BURNOUT"/GOT TIRED OF PRESSURES	1	2	3	42.12 _____ (65)
13.	DID NOT HAVE THE DESIRE TO GET THE DEGREE	1	2	3	42.13 _____ (66)
14.	OTHER (SPECIFY) _____	1	2	3	42.14 _____ (67)

43. Please indicate if any of the following conditions would be sufficient for you to seriously consider returning to graduate school in order to complete your doctorate. (ENTER NUMBERS)

		Sufficient Condition		
		Yes	No	
1.	I COULD BE CERTAIN OF RETAINING MY PRESENT JOB	1	2	43.1 _____ (68)
2.	I COULD RETAIN MY PRESENT LEVEL OF INCOME EVEN IF IT MEANT LOSING MY JOB	1	2	43.2 _____ (69)
3.	IF ALL CREDITS EARNED IN THE PAST WOULD BE APPLIED TOWARD MY DEGREE	1	2	43.3 _____ (70)
4.	SOME DEGREE REQUIREMENTS WERE WAIVED OR MINIMIZED SO I COULD FINISH QUICKER.	1	2	43.4 _____ (71)
5.	IF I COULD CHANGE FIELDS WITHOUT LOSING A GREAT DEAL OF CREDIT	1	2	43.5 _____ (72)
6.	IF THE FACULTY WOULD TAKE A GENUINE INTEREST IN THE STUDENT	1	2	43.6 _____ (73)
7.	IF THE RESIDENCY REQUIREMENTS WERE WAIVED	1	2	43.7 _____ (74)
8.	I WOULD NOT RETURN UNDER ANY CONDITION	1	2	43.8 _____ (75)
9.	OTHER (SPECIFY) _____	1	2	43.9 _____ (76)

APPENDIX C

Cover Letter

West Virginia University

Office of the Dean
College of Human Resources and Education
304 293-5703

802 Allen Hall 248
P.O. Box 6122
Morgantown, WV 26506-6122

March 18, 1985

The College of Human Resources and Education at West Virginia University is concerned because a number of qualified and competent students who enroll in doctoral programs each year never complete the requirements for the Ed.D. degree. We are interested in finding out why some students complete the degree and others do not.

Because you have actually participated in a doctoral program within the College, you have been selected, through a sampling process, to be a member of this study. We realize that you are busy and that asking you to participate is an imposition. However, your cooperation is most important, and we would greatly appreciate your taking time to respond to the enclosed questionnaire. Your participation is on a voluntary basis and you do not have to answer every question. If you are presently enrolled as a student at WVU your class standing or grades will not be affected by your participation.

Your responses will be kept strictly confidential. The identification number on the questionnaire is for the purpose of deleting your name from the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

The results of this study, which will be the basis for a doctoral dissertation, will be made available to the College of Human Resources and Education, the Vice-President for Graduate Studies, and the Vice-President for Student Affairs at West Virginia University. You may receive a summary of results by writing "copy of results requested" on the back of the return envelope and printing your name and address below it. Please do not put this information on the questionnaire itself.

We would be happy to answer any questions you may have. Please feel free to contact us at any time. Thank you for your assistance. Your responses will determine the validity of this study.

Edwin R. Smith

Dr. Edwin R. Smith
Special Assistant to the
Vice-President for Administration
and Finance

Nancy L. Valentine

Nancy L. Valentine
Doctoral Candidate
(304) 367-1415 (H)
(304) 366-3331 (W)

APPENDIX D

Post Card

March 25, 1985

Last week a questionnaire seeking information about your doctoral studies in the College of Human Resources and Education at West Virginia University was mailed to you.

If you have already completed and returned it to us please accept our sincere thanks. If not, please do so today. It is extremely important, for the accuracy of this study, that your responses be included.

If by some chance you did not receive the questionnaire, or it got misplaced, please call me immediately, collect, and I will get another one in the mail to you today.
THANK YOU!

Nancy Valentine

(304)-366-3331(W)
(304)-367-1415(H)

Nancy Valentine
Doctoral Candidate

APPENDIX E

Approval of the Institutional Review Board for the Protection of Human Subjects

The Institutional Review Board for
the Protection of Human Subjects
304 293-5270

307 Purinton House
Morgantown, West Virginia
26506

March 13, 1985

West Virginia University

MEMORANDUM

TO: Nancy L. Valentine

FROM: John T. Childress, Secretary for the Board

RE: H.S.# 10799 - "Characteristics of Doctoral Students That are Related to Completion or Non-Completion of Ed.D. Degrees in the College of HR&E at WVU"

The Institutional Review Board for the Protection of Human Subjects has reviewed and approved your Application for Exemption for your above-captioned research project.

This exemption will remain in effect on the condition that the research is carried out exactly as described in the application.

Best wishes for the success of your research.

JTC/mjt

ABSTRACT

The purpose of this study was to investigate possible relationships among selected psychological, sociological, and economic characteristics of doctoral students and compare these characteristics to the completion or noncompletion of EdD degrees in the College of Human Resources and Education at West Virginia University. In addition, academic departments within the college were compared on eight variables to see if differences within departments contributed to completion or noncompletion of the EdD.

A questionnaire, specifically designed for this study, was mailed to 254 EdD recipients and 287 nongraduates. A response rate of 82.98% of the graduates and 63.40% of the nongraduates was received. A total of 31 null hypotheses were tested. After computer tabulation, chi-square and t test statistical procedures were utilized to test for significant differences at the .05 level.

Results from the study indicate that EdD recipients were more likely than nongraduates to have: (a) grown up outside of West Virginia; (b) spent more time in full-time study; (c) lived closer the university during course work; (d) decided on his/her major field of study before receiving the undergraduate degree; (e) had a stronger commitment to his/her career; (f) had a higher financial subsistence level; (g) had different sources of financial subsidy, primarily assistantiships; (h) had more positive relationships with faculty, other students, doctoral committees, faculty advisors, and

doctoral committee chairs; (i) perceived course work to be of high quality and value; (j) had a better orientation to academic expectations and support services from both departments and WVU sources; (k) had less difficulty with the dissertation; and, (l) perceived the value of the doctorate to be a definite asset in material and nonmaterial rewards.

Variables which were not significant in explaining completion or noncompletion of EdD degrees were: (a) sex; (b) race; (c) marital status; (d) number of dependent children; (e) age when beginning or terminating the doctorate; (f) number of family members pursuing postsecondary education; (g) educational level of parents; (h) distance from the university during the dissertation; (i) physical and emotional health; (j) number of hours employed; (k) motive for beginning doctoral study; (l) second and third sources of financial subsidy; and, (m) student's perception of doctoral study when first enrolled.

APPROVAL OF EXAMINING COMMITTEE

John O. Andes, Ed.D.

Edward E. Jacobs, Ph.D.

Reita J. Marks, Ed.D.

John J. Paterson, Ed.D.

George D. Taylor, Ed.D.

17 April 1986
Date

Edwin R. Smith, Ed.D., Chair