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THE CAREER MATURITY OF GRADUATE STUDENTS

IDENTIFIED AS

ENHANCERS OR CHANGERS

by

Raymond J. Haddad

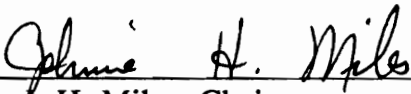
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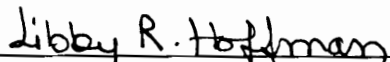
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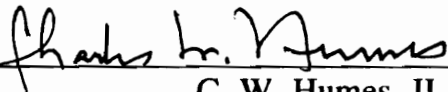
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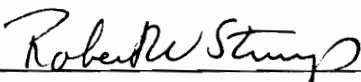
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(ABSTRACT)

The role of work in one's life, especially as it is represented by experienced workers, has been the focus of many studies; the role of education in relation to the traditional college age student's life has also been studied extensively. However, there is limited research concerning the role of education in relation to the career development of the more mature graduate student who is a member of both the educational and the work community.

The primary purpose of this study was to determine if graduate students were mature in their career development and whether there was a difference in the career maturity stages of students who attended graduate school with the intention of changing their occupations as compared with those who intended to enhance them. A secondary purpose was to

determine whether age, gender, major field of study, or years worked in current occupation had a relationship to the career maturity of these graduate students.

A descriptive design was used in the study. Instruments used to collect data were demographic data sheets and the Adult Career Concerns Inventory of Super, Thompson, and Lindeman (1988). The subjects were 200 randomly selected graduate students from one private and one public university in the Washington metropolitan area. Data were collected by survey and analyzed by descriptive statistics, chi-square analysis, t tests, and regression.

The results showed a statistically significant difference between Career Enhancers and Career Changers in the Exploration Stage of the ACCI. Age in relation to career maturity was found to be statistically significant. No statistically significant relationships were found between gender, major field of study, or years worked in current occupation and the career maturity of graduate students.

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## CHAPTER 1

### Introduction

Over 15 years ago, Wirtz (1975) reported that in the United States, over one and one-third million persons a year changed jobs across occupational categories. Current projections show that the pattern of job shifting will not diminish. According to Merikangas (1990), in the National Career Development Association survey of working Americans, 20 percent of working adults are expected to leave their jobs over the next three years. Included in these statistics were graduate students who work while attending school -- those changing careers and those advancing within their present career situations.

Increasing numbers of graduate students of nontraditional age are enrolled in universities in order to pursue further education. According to statistics published by the U.S. Department of Education (1988), the proportion of students 25 years old or older rose from 28 percent in 1972 to 39 percent in 1986. Many of these students were attending school either in order to prepare themselves for a career change or to enhance the careers in which they were currently engaged.

According to Birch (1990), on the average a student graduating from college today can be expected to have 3 to 5 careers and will change jobs (within careers) 10 to 12 times during an approximately 40

year work life. He concludes therefore that "the career-oriented person will have to have many educations" (p. 40).

In discussing student and job demographics, Galetto (1990) said that both educational and career planning and placement fields will have to adjust to the drastic changes which are occurring in the student population. He suggested that career planning and placement counselors must address these changes as they plan for the future and that research into the needs of this new student population should be done.

In relation to education, as the degree of sophistication in the work place has risen, so also has the demand for more and more educational programs to train workers, enhance their skills, and prepare them to meet the challenges of an everchanging work environment. From the time of the Civil War, the relationship of education to work has been recognized (Knowles, 1983). This relationship was linked even further back historically by Wenig and Wolansky (1983) who stated that social, economic, political, and technological factors have influenced the development of skill training programs for adults since colonial times.

The literature has begun to focus on adult workers' needs for educational and career guidance and counseling. For example, Herr and Whitson (1979), in reporting on the needs for educational information and

referral services for this population, said that "one important aspect of lifelong learning...is the provision of assistance to potential clients in sorting out alternative and often nontraditional forms of learning" (p.111). The role of work in the life of the individual, especially regarding the need for career and educational guidance, was discussed by Darkenwald (1980) who said that the need for counseling and information services to help adults make informed educational and career choices is no longer at issue. "What is at issue," he stated, "is what such services should entail...how they should be organized and articulated with education delivery systems" (p. 206).

The role of education in relation to the career development of the traditional college-age student has been reported in the literature. For example, Vollmer (1983) investigated the relationship of women's school experiences to their career development. She found that the career development of students received little impact from the school itself and less impact from counselors. She also found that although participation in professional conferences was helpful to the students in her study, more female role models and improved career advising were the major needs they identified. In examining the effects of a career development course offered to university students, Remer (1984) found that those who were

enrolled in the course showed an increase in certainty about their selected majors and their career choices.

The terms "career development" and "career maturity" are often used interchangeably; however, they are not synonymous. McCaffrey, Miller, and Winston (1984) described career development as a process which spans a lifetime. This process includes a progression in stages from simple to more complex types of behavior, with coping in earlier stages a prerequisite for dealing effectively with career tasks in later stages. The concept of career maturity has been viewed in several ways. Perhaps the most common usage of the phrase has been to equate career maturity with the attainment of a certain chronological age or with length of time in a particular occupation. In this study, as defined by Super, Thompson, and Lindeman (1988), career maturity is seen as the capability to adapt to the present career demands and an openness to looking ahead in "one's work and working life" (p. 5).

Although extensive research has been conducted on undergraduate students, limited investigation has been done concerning the relationship between education and the career development or career maturity of those graduate students who are members of both the educational and the work communities.

In relation to the counseling needs of graduate students, the literature indicated that until recently it was generally accepted that graduate students had attained maturity in their career paths. The subject appeared as far back as three decades ago when, according to Kirk (1959), many faculty members and university administrators were convinced that graduate students had very well-defined career plans. In 1966, Baird reported that the assumption had always been that graduate students were committed to a particular career field merely because they had elected to pursue advanced studies in that field. It was reported in later studies, however, (Lozoff, 1976; Tilden, 1976, 1978; Loesch, Shub, & Rucker, 1979) that these assumptions were not true.

In 1980, Clark studied the developmental processes of adult graduate students and also found that the earlier assumptions concerning graduate students lacked an empirical basis. One of these assumptions was the view that traditional-age graduate students were in a stage of prolonged adolescence; the other was the view that adult-age graduate students were self-actualized and totally self-directed in their learning. Clark's findings suggested the fallacy of these assumptions. All graduate students in the study were found to be in need of direction, support, and assistance in the learning process. Many of the students sought career

counseling for help and support in their intentions to change to careers that were different from their current job backgrounds.

In 1984, McCaffrey et al. reported that "graduate students have needs for career counseling activities that focus on vocational self-concept, including such aspects as values, needs, skills, and interests related to future work roles and life-style considerations" (p. 131).

Augustin (1985) posited that the assessment of adult graduate students' career goals can be quite difficult. He said that because these students are often beyond the traditional college age, they often come to counseling with a work history, a fairly well established financial base, and a fear of jeopardizing their employment positions.

An important factor to consider when working with adult graduate students is the recognition of the possibility of different purposes that men and women might have for attending graduate school. In a comprehensive study, Wirtz (1975) found that men considered graduate study to be a natural progression in their career development, whereas women were more apt to view graduate school as a vehicle in preparing for a major shift in career direction.

A similar observation was reported by Karp (1985). In investigating male and female professors and their differing career paths,

Karp found that most of the males in his study nearly uniformly followed continuous, linear careers, while the females' careers were typically discontinuous. He found that females were still occupied with the tasks associated with developing their careers, rather than seeking to avoid the stagnation of established careers.

Records have been maintained over the past six years in the career counseling center of the private institution in this study. These records show that when students were asked their reasons for attending graduate school, over 70% of the men replied that they were in school to help themselves to progress in their present careers. On the other hand, 60% of the women stated that they were in school for the purpose of preparing for a career change. It should be noted that these records applied only to the approximately 150 students a year who sought career counseling at a single university counseling center.

In summary, current literature indicated that the average person will have several occupational changes over a career span (Merikangas, 1990; Cetron, 1990). There does not seem to be any diminution of this trend. Indeed, based on the results of a 20 year study, Birch predicted that at the present rate today's career-oriented college graduate will change jobs 10 to 12 times before retirement.

As has been noted, there is also a major increase in the number of students of nontraditional age who are returning to graduate school. Career counselors and academic advisors should be aware of this trend in order to provide appropriate counseling and guidance in accordance with the needs of these adult students. They are often in need of educational and career planning assistance, and higher levels of their career maturity cannot be assumed. Research studies concerning graduate students of nontraditional age might provide valuable empirical foundations for the delivery of counseling and guidance services to this population. Thus, this study focused on the needs of this group.

#### Problem Statement

Since many graduate students are attending graduate school after having had the experience of being employed, and since these students appear to have more defined motives for returning to school, the problem in this study was to determine if there was a difference in career maturity between those graduate students who attended school with the intention of changing careers and those who attended school with the intention of enhancing their careers. In addition, components were added to the study

to determine if age, gender, major field of study, or years worked in current occupation were variables which were related to the career maturity of graduate students.

### Purpose

The purpose of this study was to investigate if differences existed between students who entered graduate study with varied goals. In order to determine if a difference in motivation for attending graduate school was related to the career maturity of students, one group who were attending graduate school with the intention of changing occupations (Career Changers) was compared to the second group who were attending graduate school with the intention of enhancing their present occupation (Career Enhancers).

A secondary purpose was to investigate whether selected variables (age, gender, major field of study, and years worked in current occupation) were related to the career maturity of graduate students.

### Null Hypotheses

The following null hypotheses were investigated in this study:

- Ho<sub>1</sub> *There is no statistically significant difference as measured by The Adult Career Concerns Inventory between those graduate students who intend to enhance their careers and those who intend to change their careers.*
- Ho<sub>2</sub> *There is no statistically significant relationship between the age of the subjects and their career maturity.*
- Ho<sub>3</sub> *There is no statistically significant relationship between the gender of the subjects and their career maturity.*
- Ho<sub>4</sub> *There is no statistically significant relationship between the subjects' major field of study and their career maturity.*
- Ho<sub>5</sub> *There is no statistically significant relationship between the subjects' number of years worked in their current occupation and their career maturity.*

### Significance of the Study

This study provided information concerning graduate students in relation to their reasons for attending graduate school. Furthermore, their career maturity relating to age, gender, major field of study, and years worked in current occupation was investigated. The study provided this information in relation to graduate students who were not of the traditional age and who attended school while maintaining a position in the job market.

The results of the study might provide leads to further exploration and explication of the phenomenon of career change in a society in which several career changes during a lifetime are not uncommon. Kanchier and Unruh (1987) described this society as one in which many individuals are making career changes over a lifetime without regard to age or previous job status.

It would seem that the more that is known about a population, the better the needs of that population might be served. Therefore, this investigation of work-experienced graduate students in relation to their career maturity could potentially assist educators in curriculum planning for career courses within the context of graduate programs.

The outcomes of the study might also provide some insight regarding the direction that counseling of graduate students might take, particularly for those students whose needs focus on career enhancement or career change. For example, career counselors might assist Career Changers by providing information and assisting them to explore different possibilities better suited to their needs.

In relation to the research in this area, several existing studies were found that related career maturity to students in general (Khan & Alvi, 1985) or to college students in particular (Hays, 1981; Barrow, 1982). These studies looked at career maturity as part of another construct, such as development of purpose or as related to particular curricula. However, an extensive search of relevant data bases revealed few studies which focused on career maturity for the graduate student, and none were found which focused on the combination of variables investigated in this study.

### Definition of Terms

#### Career:

According to Leeds (1988), "career" is understood to mean the jobs of a lifetime seen in retrospect as a chain. In this study, the definition used was that of Super (1955) who described a career as being comprised of a series of jobs or occupations extending over a lifetime.

### Career Maturity:

In this study, the term "career maturity" was used as defined in the ACCI Manual (Super, Thompson, and Lindeman, 1988) as the capability to adapt to the present career demands and an openness to looking ahead in "one's work and working life" (p. 5). This definition of career maturity included the following stages which may be assessed through the use of the instrument:

1. EXploration, during which a person is seeking knowledge about differing occupations, attempting to determine what occupational area to pursue, and actually beginning work in a chosen field;
2. EStablishment, which includes those who are in a posture of beginning their work positions in addition to those who are stabilizing and consolidating their positions;
3. MAintenance, which denotes those who are not only holding their own position but who also are updating their skills and making innovations in their interest areas; and
4. DIsengagement, which includes those who are beginning the process of slow retreat from the concentrated efforts formerly given to job tasks. For those persons, more planning and consideration is given to leisure and even to a change of life style

which was once dominated by the need to put forth much energy on behalf of work.

Career Changer:

According to Brown, Brooks, and Associates (1984), "Mid-life career change is a process in which an adult, usually between the ages of 35 and 45, enters a new occupation that may require mild, moderate, or extreme adjustments in training or in experience" (pp. 371-72). With this definition as a foundation, Career Changer was defined in this study as a person who moves from one field of endeavor to a different area of work. An example of this would be the change from practicing law to becoming a guidance counselor.

Career Enhancer:

The term used to describe a person who moves within the same career field (Karp, 1985).

Graduate Student:

A person registered in an academic program leading to a master's or doctoral degree. This person must have maintained a job for at least one year and must, at the time of the study, have been working while attending school.

**Major Field of Study:**

The field of concentration which is designated as the major in the earned degree. For purposes of this study, the major fields of concentration were:

*Business*

*Education*

*Human Resource Development*

*Nursing*

*Counseling and/or Psychology*

*Engineering*

*Liberal Studies*

**Limitations**

1. In order to control for possible intervening variables related to non-focused learning (attendance at school without any intention of obtaining a degree), this study was limited to those graduate students who were in degree-granting programs;
2. In order to control for possible intervening variables related to the advantages or disadvantages of having had work experience, this study was limited to graduate level students who had worked for one year or more.

3. In order to control for possible intervening variables of non-career-related pursuit of a degree, this study was limited to graduate level students who expressed their intention either to enhance or to change their careers.

The above exclusions are limitations of this study. Consequently, the study is generalizable only to those graduate students who meet the above criteria.

#### Organization of the Study

Chapter Two consists of an examination of the research studies in regard to career development, career maturity, career change, and graduate students' motivation for attending school. It also includes an examination of the selected variables (age, gender, major field of study, and years worked in current occupation) in relation to the career maturity of graduate students.

Chapter Three contains a description of the research design, methodology, and study instruments. Procedures for the collection of data and statistical techniques for data analysis are presented.

Chapter Four contains descriptive data concerning the respondents as well as the findings resulting from the testing of the hypotheses.

Chapter Five presents conclusions of the study based upon the data analysis. Discussion of the findings, recommendations for further study, and implications for counseling and education are included.

## CHAPTER 2

### Review of the Literature

#### Introduction

The literature review for this study was organized into the following areas: career development, career maturity, career change, and graduate students' motivation for attending school. The section on motivation for attending school concerned the question of whether students were attending graduate school in order to prepare for changing or enhancing their present careers. A general overview is presented, followed by research studies which are appropriate to each area. Chronological order was followed in each area where it was appropriate in context.

A review of the literature revealed few studies which explored the graduate student population specifically; even fewer studies were found which investigated their career maturity. Thus, this review considered studies that included graduate students in relation to variables other than those investigated in this study. It also included studies that were not centered on graduate students but which did relate to other variables which were under investigation in this study.

### Career Development

According to Brown et al. (1984), "Career development is for most people, a lifelong process of getting ready to choose, choosing, and, typically, continuing to make choices from among the many occupations available in our society" (p. 1). The career development literature provided a wide range of studies in relation to age. This range was as wide as the interpretation of the term itself, which can be looked at from many perspectives. Since this study concerned adult graduate students, the overview of the literature relating to career development considered only the range from those in graduate school to those in retirement.

There has been a growth in the perception of career development as a process beginning with one's initial awareness of self and continuing until retirement or cessation of activity. This view suggests a linear pattern of career development in which a person progresses from one stage to the next. According to Brammer and Abrego (1981) and Okun (1984), this is seen to be particularly the case for adults perceived to be in crisis. Until recently, it was assumed that adulthood is a period of stability between the "turbulence" of adolescence and the "deterioration" of old age. Adulthood is somewhere in the middle and is viewed as the

interval of stability and quietude between adolescence and advanced years.

However, according to Kapes (1984), in terms of career development, this period of stability no longer exists. The workplace is changing, workers are changing, and both education for employment and the educational system that is directed towards meeting the career development needs of adult workers also need to change. In discussing the needs of adults in transition, Wilburn (1988) suggested that employment counselors have many opportunities for increased effectiveness in counseling individuals seeking second career opportunities.

The Developmental Life Span model of Gladstein and Apfel (1987) used life stage characteristics as a base. The model included six states of career development:

1. *Awareness,*
2. *Exploration,*
3. *Preparation,*
4. *Entry,*
5. *Maintenance, and*
6. *Decline.*

These states are the basis for the counseling programs used in many places, including the university where this researcher is employed.

The following are reports of investigations concerning career development; emphasis has been placed on those studies which involve graduate students. However, as mentioned above, other studies which concern variables appropriate to this study were also included.

In studying career development among college students, McCaffrey et al. (1984) compared 60 freshmen, 60 seniors, and 60 graduate students on the basis of their scores on the Career Development Inventory (CDI) (Super, Zerkowitz, & Thomas, 1975). They found that the mean scores of freshmen and seniors on the exploration and establishment stages differed by 20 percent. They found little difference between the scores of seniors and graduate students in contrast to the gap in scores between freshmen and seniors. Also, no major differences were found on the same means between men and women.

Considering career development from the aspect of a process of stage accomplishment, Clark (1980) studied adult graduate students in doctoral programs in psychology and the humanistic sciences. Her study revealed that graduate students needed direction, support, and assistance in the learning process and in career guidance. Minor (1980) compared

the relationship of students' previous career development stages to their adjustment to graduate school. He found that while older students were more satisfied in their career stages, they nevertheless experienced the same stresses and expectation–reality discrepancies as did younger students. The older students also needed guidance in relation to career goals.

In a survey conducted with nontraditional degree–seeking new students at the Ohio State University, Dean and Eriksen (1984) found that these students entering college faced many other transitions in their lives and needed help with many barriers. In relation to helping adults in transition, they suggested that academic counselors should be aware of the issues and use counseling skills effectively. Program changes should be made to ease the transition to college for adult students. They also said that in order to assist these students, counselors should assess the adult's life and career development stages and focus on removing educational barriers.

On the other hand, Tyler (1984) found that most incoming graduate students made their own rational decisions about how to link learning and strategy with their own experience and selected goals for the purpose of producing consequences related to their personal career development

goals. Similarly, Goodman (1984) studied professional choice, socialization, and career development of graduate students in student personnel work. He found that, for the most part, the students determined for themselves what to learn, how to function, and whom to emulate, based on personal reactions to their environments.

The influence of gender on career development has been considered by several researchers. In studying the career development of over 550 graduate students in gender-dominated professions, Shann (1983) found that there were clear patterns of sex differences in the feminine professions. However, with the exception of child care, the plans of women in the male-dominated groups were not significantly different from those of their male colleagues. Also in 1983, Vollmer studied the impact of women's school experiences on their career development. Based on the results of a questionnaire concerning factors influencing their career development, Vollmer's study concluded that female students were encouraged to succeed by family, friends, and some faculty. However, the women's interactions with other graduate students and academic advisors were found to be less influencing, and the interactions with counselors were considered least influencing on their career development.

Fitzgerald and Cherpas (1985) found that gender-based stereotypes, long known to function as barriers to women's career development, also functioned reciprocally as barriers to the career development of men. This concept was tested on graduate students enrolled in counseling courses. When presented with videotapes of males wanting to be nurses, negative reactions were expressed by the respondents. According to the authors, this finding was related to the somewhat prevalent attitude toward women who aspired to be engineers or architects.

Cesarano-Delacruz (1985) examined the relationship between self-efficacy and vocational maturity and the extent to which sex moderated this relationship. She hypothesized that the level of self-efficacy would have an impact on vocational maturity and that this impact would differ by sex and by traditionality of occupation. In this study, males were found to have significantly higher Career Planning and Career Development Attitude scores than did females. Self-efficacy was also found to be related to a career maturity variable for males but not for females.

Borman and Guido-DiBrito (1986) found that although the career development process for women was similar to that of men, there were

some differences. These differences were evident in such areas as educational–vocational goals, values, work attitudes, time frames for vocational decisions, preferences for people–oriented and object–oriented jobs, and concerns over status and prestige. They concluded that while there were similarities between the sexes in the career development process, there were enough differences to warrant distinctive theories or sub–theories for each gender.

However, an absence of gender bias in relation to career development was found by Harris (1986). In studying the career aspirations of male and female candidates for the Master of Library Science degree, he found no gender differences among these students either in regard to aspirations or to specificity of career development goals.

In relation to a consideration of later career development, Super (1984, 1986) categorized the 45 to 65 year old worker as being engaged in career maintenance and the 65 year old worker as being engaged in decline. This was described in a job stage and age related model and was called the maxicycle.

Hall (1986) described mid–career as "the period during one's work in an occupational (career) role after one feels established and has

achieved perceived mastery and prior to the commencement of the disengagement process" (p. 127). Retirement, on the other hand, was described by O'Brien (1986) as the time when individuals no longer defined themselves in terms of their work. This stage was further described as a time in which retirees are perceived to hold a less valuable social role and in which they gain their primary satisfaction from social interaction.

However, in studying early retirees, Hatcher (1988) found that the latter did not consider themselves out of the work force. His results showed that they only considered themselves to be moving from one workplace to another. According to Gilkison and Drummond (1988), older adults are now seeking new areas of work which require skills that they must acquire. Although it is generally believed that older adults can continue to develop and learn, they are not being retrained in great numbers. The authors suggested that those who do re-enter school should be recognized and treated as a select population which has distinct requirements and needs.

### Career Maturity

Career maturity can be understood in several ways. At first glance, one might expect maturity to relate directly to an individual's age. It might be also be seen as an extended time spent on a particular job or occupation. Another approach to the understanding of career maturity might be that it is related solely to the position one holds. For example, the president of a company might be viewed as being more career mature than a subordinate.

In a paper presented in 1985, Super discussed career maturity and its development as a readiness to cope with the developmental tasks that one faces at a given stage in life. It is in this sense that the literature on career maturity for this study was reviewed. A further clarification of what is meant by Career Maturity was offered by Super in 1988 when he said,

[Career] Maturity and adjustment have often been confused, even by psychologists... Adjustment is an outcome of behavior, whether defined as satisfaction (an attitude) or as success (achievement); it is essentially retrospective, for it relates a present condition to past actions. Maturity differs by being prospective; it consists of behaviors and attitudes

manifested in the present which pertain to tasks being dealt with in the present or likely to be encountered in the future. The vocationally adjusted person is one who is doing what he likes to do and is a success at doing it; the vocationally mature person is coping with tasks appropriate to his life stage in ways which are likely to produce desired outcomes (p. 26).

In relation to career maturity, there has been a gradual unfolding of information based on studies of college students. These have shown definite relationships between career maturity (as first described by Super in 1955) to other environmental and personal factors such as age, gender, and position in a work setting.

Hays (1981) studied the vocational maturity of graduate students from the exploration to the establishment stage. Their certainty of career goals was investigated as these goals related to vocational developmental stages. Hays' major hypothesis – that those graduate students who claimed to have particular goals were more involved with the implementation tasks than were those who did not – was not supported.

In studying graduate students, Barrow (1982) examined the construct "development of purpose" among graduate students. This

construct included career maturity, educational maturity, and internal locus of control. She found that the level of graduate education, sex, and college of the graduate students did significantly affect their development of purpose.

Royalty (1984) studied the self-esteem of female college students at two large state universities. Attention was given to the relationship of self-esteem to the choice of traditional or nontraditional careers. A second area of interest was the relationship of career maturity and locus of control to career type. The senior women, as a group, scored significantly higher than did the freshmen on the variables of self-esteem and career maturity. To the extent that these findings suggested a developmental change, Royalty concluded that the results clearly supported the central propositions of developmental self-concept theories of vocational choice.

In relation to field of study, Khan and Alvi (1985) found a difference in career maturity levels among students who were in different curricula. Their results showed that students in an academic course of studies scored higher than did students in technical or business tracts.

Using the ACCI, Ralph (1986) assessed the interrelationships among self-concept, locus of control, age, and career maturity for 109

graduate nursing students. Results showed that self-concept and locus of control were strongly related to the exploration stage and the career change stage of the ACCI. She also found that age was significantly related to the disengagement stage and career change stage. Ralph concluded that for the purposes of counseling, this population showed greater vocational concerns in the stages of establishment and maintenance of the Adult Career Concerns Inventory.

Super has continued to develop the "career maturity" thesis. Nevill and Super (1988) described their recent study in which career maturity was measured against gender, socioeconomic status, and college level. The conclusion of this study was that career planning was more prevalent among juniors and seniors in college than among freshmen and sophomores. They also found that women were more committed to work than to home, yet they expected less personal satisfaction from work than did men.

### Career Change

Prior to World War II, jobs were taken and kept for many years. In fact, it was not unusual for a person's job to last a lifetime. However, this is no longer true. As our society has become more mobile, both in a geographic and in an occupational sense, interest in the phenomenon of

career change has grown. Many have recognized the stress and trauma that uprooting inflicts on a person who decides to change occupations. As a result, according to Gladstein and Apfel (1987), in recent years there has been a surge of interest in providing counseling services to adults in transition.

Although few studies were found which linked career change with graduate students, there were investigations about adult career changers. Some of these are presented in the following paragraphs.

In a study by Henton, Russell, and Koval (1983), 20 wives of career changers were interviewed about their husband's work history, the actual career change, and the reason for the career change. The results of this study showed that 59 percent of the husbands had changed careers in order to seek increased challenge in work. As a means of better meeting this increased challenge at work, all changers in the study had returned to school to prepare for the change, and this had caused many adjustment problems in their home and family situations.

Rosenwald and Wiersma (1983) studied women's reports of their own career changes. They found that what the subjects called "benefits" could just as easily have been interpreted as detriments. The reports moved from a factual retelling of events to a strong call for action.

Slaney and Dickson (1985) studied the relation of "career-decided" versus "career-undecided" attitudes to training for women re-entering the job market. Their results supported the importance and influence of career indecision over time, regardless of whether or not training was given to assist the subjects in the decision-making process. In other words, training did not change the indecision of the subjects.

S. L. Perosa and L. M. Perosa (1985) investigated the midcareer crisis to determine if sex differences distinguished midcareer changers. They found that individuals who changed careers scored significantly higher on identity achievement and affiliation and that there was a significant positive correlation between identity achievement and self-concept. In the study results, no sex differences were shown.

Also in 1985, Lachs investigated voluntary midlife career changers in regard to the roles that education and counseling played for this population. He found that education was important to this group and that they were likely to continue their educational pursuits. He recommended that counselors take an holistic view of career change as part of overall development. This finding concurred with the beliefs of Super (1985).

### Motivation for Graduate School Attendance

Since this study investigated career maturity in relation to graduate students who were returning to school for the purpose of changing or enhancing their careers, studies concerning graduate students' reasons for returning to school were included in the literature review.

In studying adult development characteristics and reasons for pursuing higher education, Holley (1981) concluded that stereotypical descriptions of adult life stages and predictable sequences of adult development may not represent returning graduate students. There were many instances in which persons returned to graduate school in direct opposition to the presumed norm of adult activity. Many understood adulthood as a straight-line development (Gladstein & Apfel, 1987), while these graduate students did not follow that strict an approach.

Ingram (1983) investigated factors reported by graduate students which influenced them to pursue a graduate degree in adult and continuing education. Holland's theory of vocational choice (1973) did not prove itself in predicting change of majors by graduate students in this study.

In studying the reasons for pursuing graduate training among graduate and undergraduate Special Education majors, Spence (1985)

found that the overwhelming motivation for attending school for these students was to enhance their careers in Special Education. She also found that 90 percent intended to remain in Special Education, either as teachers of the mildly handicapped or as consultants.

Stewart (1986) investigated the degree of vocational maturity in a sample of 293 adult students. She found that 26% viewed college as a means for career change and 27% considered it an opportunity for career enhancement.

Oatis (1988) studied graduate students who had been away from formal education for at least two years. He compared those who graduated (persisters) to those who did not graduate (non-persisters). These two groups were studied in relation to their primary motivation for returning to graduate school. Results showed that persisters were more likely to report that their career-related motive for returning was to "retrain," while non-persisters cited "keeping up" as their primary motive.

Meir (1988) conducted a study that was a follow-up on a 20 year old finding on the relationship of interests to vocational satisfaction and job motivation. The original groups, investigated as young adults, were now in their late thirties, and they had had many years of work experience. At the same time, technological advances had broadened the choices within their

occupational fields. With these facts in mind, Meir concluded that both at the outset of one's work as well as in later years, it was necessary to maintain high motivation and that a relationship between vocational interest and job satisfaction did exist.

### Summary of Literature Review

The four areas considered in this review were: career development, career maturity, career change, and graduate students' motivation for attending school.

The literature showed *career development* as a phenomenon not terminated at a given point in one's life but rather as a continuing process (Brown et al., 1984). Minor (1980) pointed out that graduate students manifested many of the same stresses as did younger students, yet there were mixed results regarding the needs of adults to link their learning experiences with work related goals (Hays, 1981; Spence, 1985). Career development did not consistently depend significantly on any particular variable such as gender, yet Shann (1983) and Borman and Guido-DiBrito (1986) reported differences between male and female students. These distinctions were primarily in the areas of values, work attitudes, and needs for status and prestige.

*Career maturity* was found to be an evolving concept that required continual redefinition. Based on Super (1955), the concept of career maturity has been applied to various categories of the population, and particularly to students. Until recently, many scholars had assumed that graduate students had attained career maturity (McCaffrey et al., 1984). However, studies were cited which indicated that career maturity in graduate students could not be taken for granted (Royalty, 1984; Ralph, 1986).

The literature revealed *career change* as a growing reality on the American scene. Conjoined with this fact was the question of why more and more adults are returning to graduate school. Their *motivation for attending school* has been studied, and findings indicated that the majority returned to school for the sake of their careers (Stewart, 1986). This finding was supported by Oatis (1988) who reported that the majority of those who graduated had definite career goals, in contrast to the less focused goals of those who did not graduate.

The literature review produced a picture of evolving concern in the areas of career development and career maturity with a gradual centering on particular populations, such as middle-aged persons and undergraduate college students. Despite the increasing number of studies relating to

careers, there still remains a wide area of unexplored territory in the field of career maturity in relation to graduate students.

Chapter 3 contains a description of the research design, methodology, and study instruments. Procedures for the collection of data and statistical techniques for data analysis are presented.

## CHAPTER 3

### Methodology

#### Introduction

In Chapter Three the research method and design are described. The setting, manner of sample selection, instruments used for the gathering of data, and the statistical procedures used in analysis of the data are also presented.

The problem addressed in this study was to determine whether graduate students who intended to remain in their present occupations differed in terms of career maturity from those graduate students who intended to change their occupations. In addition, the selected demographic variables of age, gender, major field of study, and years worked in current occupation were examined for their relationship to career maturity.

#### Research Design

The research design was a descriptive design in which the data were collected by means of a survey. According to Huck, Cormier, and Bounds (1974), the purpose of descriptive research is to "describe things the way they are rather than to investigate a cause-and-effect relationship" (p. 18).

### Setting

Two locales were used for the collection of data. The first was a satellite campus of a large state university whose student population consisted primarily of residents from the surrounding metropolitan area. The second one was a private university in the same metropolitan area. Data were collected during the summer semester of 1989.

### Sample

The sample for the study included 200 randomly selected individuals from the two universities whose enrollments were about equal. By means of a table of random numbers, 100 subjects were selected from each university. Those selected met the study criteria of being in a graduate degree program and of having had one or more years of work experience. A proportional random selection was used in obtaining the samples from the two schools. According to Hinkle, Wiersma, and Jurs (1979), in order to ensure the representativeness of a sample in which several subpopulations exist, the subpopulations are divided into strata. The most commonly used procedure in determining the number of members from each stratum is proportional allocation. With proportional allocation, each stratum contributes to the sample the number of members proportional to its size in the population. After the sample number has

been allocated to the strata, a random sample is then selected in each stratum.

In the study, the entire enrollment in the summer semester of 1989 was obtained from each school. A count of the enrollment in each major field of concentration was made; percentages of the students in each major to the total enrollment were then calculated. Using a table of random numbers, the investigator selected the appropriate number of students from each area of concentration based on the same proportion as calculated above. The proportional breakdown was as follows:

<u>UNIVERSITY</u>	<i>N</i>	<i>%</i>
<u>STATE</u>		
<i>Business</i>	<i>121</i>	<i>25</i>
<i>Education</i>	<i>154</i>	<i>31</i>
<i>HRD</i>	<i>66</i>	<i>13</i>
<i>Counseling/Psychology</i>	<i>108</i>	<i>21</i>
<i>Engineering</i>	<i>53</i>	<i>10</i>
<u>PRIVATE</u>		
<i>Business</i>	<i>399</i>	<i>70</i>
<i>Education</i>	<i>57</i>	<i>7</i>
<i>HRD</i>	<i>71</i>	<i>11</i>
<i>Nursing</i>	<i>45</i>	<i>7</i>
<i>Counseling/Psychology</i>	<i>21</i>	<i>3</i>
<i>Humanities</i>	<i>6</i>	<i>2</i>

## Instrumentation

### Data Sheets

Data sheets designed by the investigator were used to gather demographic information about the respondents. The data sheets used at each of the universities sampled were identical except for the listing of major fields of study. In this area, a difference existed. The private university had a school of nursing which the state university did not have, and the state university had a school of engineering which the private university lacked.

The following information was sought on the data sheets: the subjects' major field of study, the subjects' intent to stay in or leave their present occupation, the relevancy of present course of study to future work, the reason for attending graduate school, and the length of time in the subjects' present occupation. Since all but one major field was career oriented by definition (e.g. Business, Nursing, etc.), there was no category of graduate study for personal gratification as motivation for attending school. One university did offer a major in Liberal Studies, but the proportional allocation was small and only a single subject from this major field responded (see Appendix A for Data Sheets A and B).

### The Adult Career Concerns Inventory (ACCI)

The ACCI was used to measure career maturity in this study. According to the testing manual (Super et al., 1988), the ACCI was designed to be self-administered and self-scored. In this study, however, scoring was done by a research assistant in order to insure against the possibility of investigator bias and to check for respondent error and/or omissions. It was suggested to the respondents that 15 to 20 minutes would be required to complete the instruments. However, the instructions in the manual imposed no time limit, so none was given.

On the ACCI, questions were asked regarding age, gender, marital status, educational level, and employment status. In addition, a query was made concerning the subject's job and career satisfaction.

Following the demographic data section, the main instrument consisted of 61 items. Item 61 was a direct question about career change plans. Items 1–60 were divided into four stages of 15 items each. Each of the 60 items was to be answered according to a five-point Likert scale which ranged from "None" to "Great". This scale was designed to ascertain the degree of current concern for each item.

The four stages of the instrument were further divided into three substages comprised of five items each. The total outline of the ACCI

instrument, excluding question 61, can be viewed in the following schemata:

<i>ACCI STAGE</i>	<i>ACCI SUBSTAGE</i>	<i>ITEMS</i>
<u><i>EX</i></u> <i>ploration</i>	<i>Crystallization</i>	<i>01-05</i>
	<i>Specification</i>	<i>06-10</i>
	<i>Implementation</i>	<i>11-15</i>
<u><i>E</i></u> <i>Stablishment</i>	<i>Stabilizing</i>	<i>16-20</i>
	<i>Consolidating</i>	<i>21-25</i>
	<i>Advancing</i>	<i>26-30</i>
<u><i>MA</i></u> <i>intenance</i>	<i>Holding</i>	<i>31-35</i>
	<i>Updating</i>	<i>36-40</i>
	<i>Innovating</i>	<i>41-45</i>
<u><i>DI</i></u> <i>sengagement</i>	<i>Deceleration</i>	<i>46-50</i>
	<i>Retirement Planning</i>	<i>51-55</i>
	<i>Retirement Living</i>	<i>56-60</i>

The five items for each substage were weighted and averaged as per the manual instructions. A score for each substage was thus acquired. By means of averaging the scores of the three substages, a score for each stage was determined. This number relates to the four major areas of examination of the instrument: a person's concerns regarding EXploration, EStablishment, MAintenance, and DIengagement.

A profile of each respondent was then plotted which indicated the degree of concern in each substage as well as the major finding within

each of the four career stages. It was the latter that this study addressed, particularly the stages of EXploration, EStablishment, and MAintenance.

In addition to the previously described scoring method, the ACCI was scored "ipsatively," meaning that although external norms were available, the best overall effectiveness of the instrument was a measure against the subjects themselves (Super et al., 1988). In arriving at the findings in this study, a median was derived from the scores of each of the subjects. This median differed from the normative medians provided by the authors of the ACCI.

In contrast to achievement or aptitude tests, the ACCI does not consider a high percentile as better than a low percentile. For example, according to Super et al. (1988), a rating high in EXploration and low in EStablishment means only that the person with these scores was more interested in looking at a new career than in starting a new job or settling into a new work situation.

Reliability of the ACCI was reported in the Manual as being strong. Earlier forms of the ACCI had alpha coefficients in the .80s and .90s in the stage and substage areas, respectively. The 1988 form used in this study also showed these same reliability figures. In reporting the findings, the author stated that the only substage that consistently

registered a lower alpha than .90 was Deceleration, which is under the stage of Disengagement. The remaining alpha scores, both in the substage and in the stage areas, were as they were found previously.

The validity of the ACCI was supported by the authors on the basis of continuity with predecessor instruments and analysis of the normative data. Support was lent to this statement by Savickas, Passen, and Jarjoura (1988) who tested the validity of the ACCI. Their results increased the validity data supporting the ACCI. In their study, the instrument did indeed measure what it was designed to measure, that is, issues which were occasioned by vocational developmental tasks.

The ACCI was chosen for use in this study because it was designed to view the career stage of the adult who may be in the middle of a "successful career" and yet who may wish to explore other areas, or, indeed, who may wish to make a drastic change.

#### Procedure for the Collection of Data

Requisite permissions for collecting the data were obtained from the two universities whose students were the subjects of investigation. In the case of the state university, the proposed study was reviewed and approved by the designated representative of the ethics committee. Permission to collect data was given by the Director of the state

university facility. The private university granted approval through the Office of the Provost.

Packets were then prepared for the 100 randomly selected graduate students at each institution. The contents of the packets consisted of:

1. A short letter of introduction from the investigator explaining the study and stating that the study had the approval of the school authorities. In the letter, the prospective subject was assured of anonymity and confidentiality and was promised a report of the results upon completion of the study (see Appendix B);
2. A consent form which was to be signed and returned to the investigator (see Appendix C); and
3. The study instruments which consisted of the data sheet and the ACCI questionnaire and answer sheet.

At both of the universities, a list of the students and their classes was made available to the investigator so that the packets could be distributed to the subjects on campus. At the private university, each professor was contacted by the investigator and asked to distribute the packets to the subjects. At the state university, a letter from the campus director was addressed to the faculty asking them to distribute the

packets. In this letter, instructions were given that the packets could be returned to the central mail drop in the registration office to be collected by the investigator.

To assure anonymity and confidentiality, instructions were given that neither name nor other identifying information was to be written on either of the forms. Although a consent sheet was included in each of the packets, these were removed from the packet by the research assistant so that the investigator did not see the names associated with the responses submitted.

Collection of data proceeded over a six-week period. The majority of data were returned within two weeks, but because of scheduling which included bi-weekly classes, returns came in throughout the six-week time span.

#### Data Analysis

In order to facilitate the analysis of the data, the computer program Number Cruncher Statistical System (Hintze, 1987) was used. Descriptive statistics were developed for the respondents as a whole and according to groups.

### Variables

The independent variables in this study were the classification of career enhancement or career change and the demographic variables of age, gender, major field of study, and years worked in current occupation. The dependent variable was career maturity.

### Classification

The classification of "Changers" and "Enhancers" was determined by the responses given on the demographic data sheet which was validated by question 61 in the ACCI. The latter asked the respondents to indicate their current status by stating that they are or are not planning a change. The information taken from the demographic data sheet was used in the data analysis.

Career Maturity was first determined by using the normative medians listed in the ACCI. These norms were based on age groups and combined sexes (male and female) as opposed to separate tables for each sex. These norms were further listed under each life stage which is used in the ACCI (see Chapter 1, pp. 13–14, for explanation of life stages).

Data were initially analyzed by means of descriptive measures. Means and standard deviations were computed for the continuous variables of age and years worked in current occupation.

### Null Hypotheses

In order to determine if there were differences between Career Changers and Career Enhancers, the following null hypothesis was tested:

Ho<sub>1</sub> There is no statistically significant difference as measured by The Adult Career Concerns Inventory between those graduate students who intend to enhance their careers and those who intend to change their careers.

In order to determine if there was a relationship between career maturity and selected demographic variables, the following null hypotheses were tested:

Ho<sub>2</sub> There is no statistically significant relationship between the age of the subjects and their career maturity.

Ho<sub>3</sub> There is no statistically significant relationship between the gender of the subjects and their career maturity.

Ho<sub>4</sub> There is no statistically significant relationship between the subjects' major field of study and their career maturity.

Ho<sub>5</sub> There is no statistically significant relationship between the subjects' number of years worked in their current occupation and their career maturity.

In order to test the hypotheses, the subjects were first divided into two groups: Enhancers and Changers. They were then further divided according to age groups 20–34, 35–45, and those over age 45. Respondents were classified as career mature or not, based on their score for a stage and their career status.

Using only one scale, EXploration, Career Changers were considered career mature if they were above the normative median (3.41) on this scale. If below the median, they were not considered career mature. Career Enhancers were considered career mature if below the median on the EXploration scale and not career mature if above the median. To designate career maturity based on the medians of those persons in the study (ipsative measure), the designation RM was used. The designation SM was used for career maturity based on norms taken from the test instrument (normative measure).

Using two scales, EXploration and MAintenance, Career Changers were considered career mature if above the normative median on the EXploration scale (3.41) and below the median (3.4) on the MAintenance scale. Otherwise, they were considered not career mature. Career Enhancers were considered career mature if their scores were below the median on the EXploration scale and above the median on the

MAintenance scale. Otherwise, Career Enhancers were not considered career mature. Again, two designations were used depending on the basis for the determination of career maturity. RMT was used to denote career maturity based on the medians of the respondents (ipsative measures) and SMT was used to denote career maturity based on the medians of the test instrument (normative measures). The complete tables resulting from these calculations may be seen in Appendix D.

The reason that not all of the ACCI stages were used was that the hypotheses were concerned with those who were pursuing graduate studies and who already were engaged in working situations. The subjects were continuing their education either to enhance their present positions or to prepare for a career change. Thus, the two areas of EXploration and MAintenance were most appropriate for consideration in this study.

### Hypothesis Testing

An independent samples t test was used in order to determine if a difference existed between Career Enhancers and Career Changers in relation to the four stages of the ACCI. According to Huck, Cormier, and Bounds (1974), the t test is used to compare the means of two groups. If sample means are far enough apart, the t test will yield a significant

difference and thus allow the researcher to conclude that the two groups do not have the same means.

In order to determine if there was a relationship between the career maturity measures and the demographic variables of gender and years worked in current occupation, chi-square contingency analysis was used. Chi-square was selected since this test was designed to be used when the scale of measurement for the dependent variable is less than interval (Hinkle, et al., 1979). The chi-square analysis compares frequencies which are observed with those that would be expected if there were no significant relationships between the variables under investigation.

Regression was used to determine how well the independent variables of age and years worked in current occupation described a possible relationship to the dependent variable of career maturity. This procedure, according to Harris (1975), is utilized by those wishing to assess the relationship between variables without manipulation of the data. Though this study is properly designated as a descriptive one, Huck, Cormier & Bounds commented "that both descriptive or inferential techniques are used in both descriptive and experimental studies" (p. 18).

### Summary

This was a descriptive study in which the survey method was used for the collection of data. The instruments were the ACCI and data sheets developed by the investigator.

Subjects for the study were selected by proportional random sampling from two universities, one private, the other state-supported. Graduate students attending during the summer semester of 1989 were the respondents. Data were coded and tabulated by a research assistant. Analysis was done by means of chi-square analysis, t tests, and regression.

Chapter 4 contains descriptive data concerning the respondents as well as the findings resulting from the testing of the hypotheses.

## CHAPTER 4

### Presentation of the Findings

#### Introduction

The results of the data analysis are reported in this chapter. Descriptive data concerning the respondents are given, and the outcomes concerning each of the null hypotheses are presented.

This study investigated the differences between graduate students on the stages of the Adult Career Concerns Inventory (ACCI) (Super et al., 1988) based on whether they intended to change careers or to remain in their current occupations. The study examined career maturity in relation to the selected variables of age, gender, major field of study, and years worked in current occupation.

The survey method was the design used in this descriptive study. The survey consisted of the ACCI and two demographic data sheets which were designed by the investigator. The data sheets were identical except for the listing of major field of study, where a difference existed between the two universities used in the study (see Appendix A).

Random sampling of the two university populations provided respondents from whom data were collected over a six week period. The random sampling was done on a proportional basis according to a classification by academic majors of the students. The sample consisted

of 100 graduate students from the private university and 100 graduate students from the state university. The only students included in the survey were those who were enrolled in graduate classes during the 1989 summer semester when the data were collected. The selected students were asked to complete the survey and return them to the investigator in a designated place for each school.

Of the 200 requests sent out, 115 were returned; this was a 57.5% response rate. Of these, 112 had been completed and were used in the study. There were 59 completed questionnaires from the private university, a 59% return, and 53 from the state university, a 53% return. In regard to the categories of age and gender, one respondent failed to provide data. Consequently, when reporting on these variables, a sample of 111 was utilized.

After the ACCI questionnaires and the data sheets had been returned, they were tabulated and scored by a research assistant. The purpose of this was to protect against the possible bias which might have occurred as a result of scoring by the investigator.

Responses on the demographic data sheet identified the respondents as either "Career Changers" or "Career Enhancers." Chi-square analysis, t tests, and regression analysis were then used to test the hypotheses.

### Descriptive Data

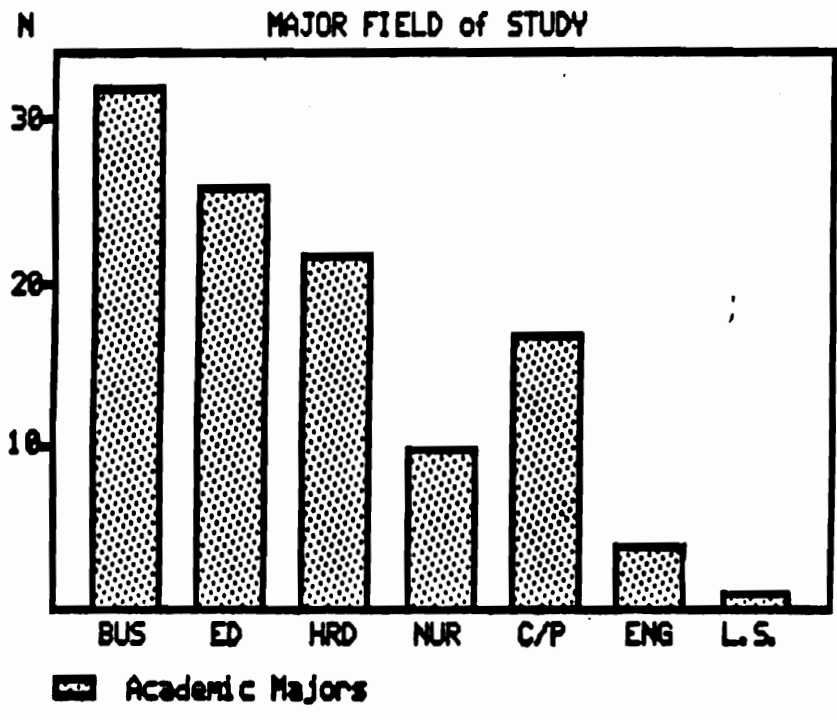
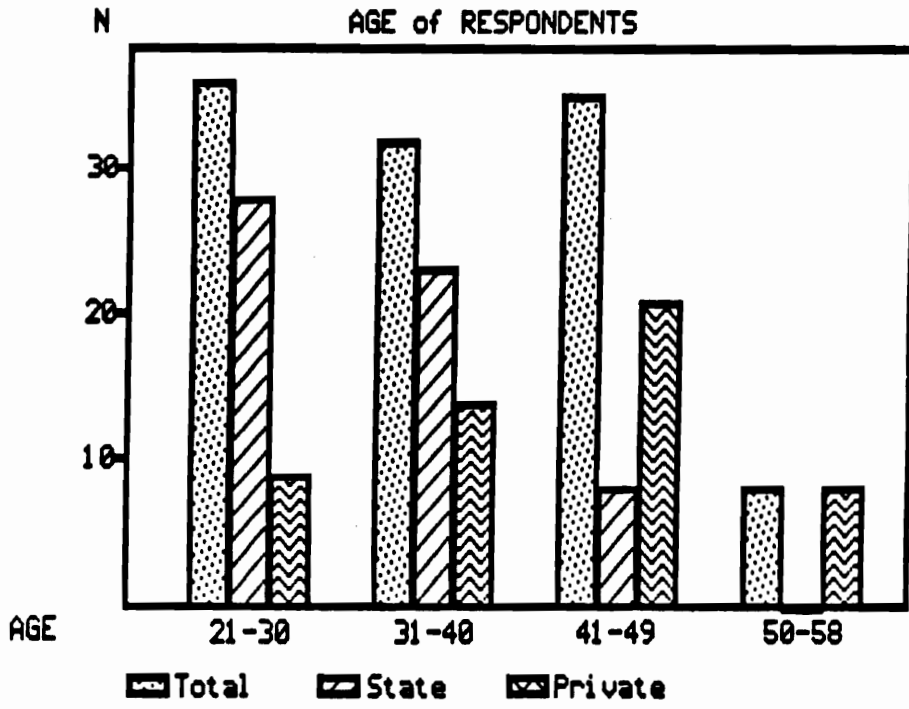
The following sections contain descriptive data concerning the respondents. Data describing the total group of respondents are given, followed by comparisons of the demographic variables of age, gender, major field of study, and years worked in current occupation in relation to school attended.

#### Age

The average age of the total group was 35.4 years. Based on school attended, the average age of the respondents from the state university was 41.1, while the average age of those from the private university was 30.7 (see Figure 1).

#### Gender

Among the respondents, the women outnumbered the men by more than 2 to 1. Of the 111 respondents who reported gender, 75 were female (67.6%) and 36 were male (32.4%). From the state university, there were 16 males (30.2%) and 37 females (69.8%), while from the private



**FIGURE 1**  
**Demographic Data**  
**Age and Major Field of Study**

university, there were 20 males (34.5%) and 38 females (65.5%) (see Figure 2).

### Major Field of Study

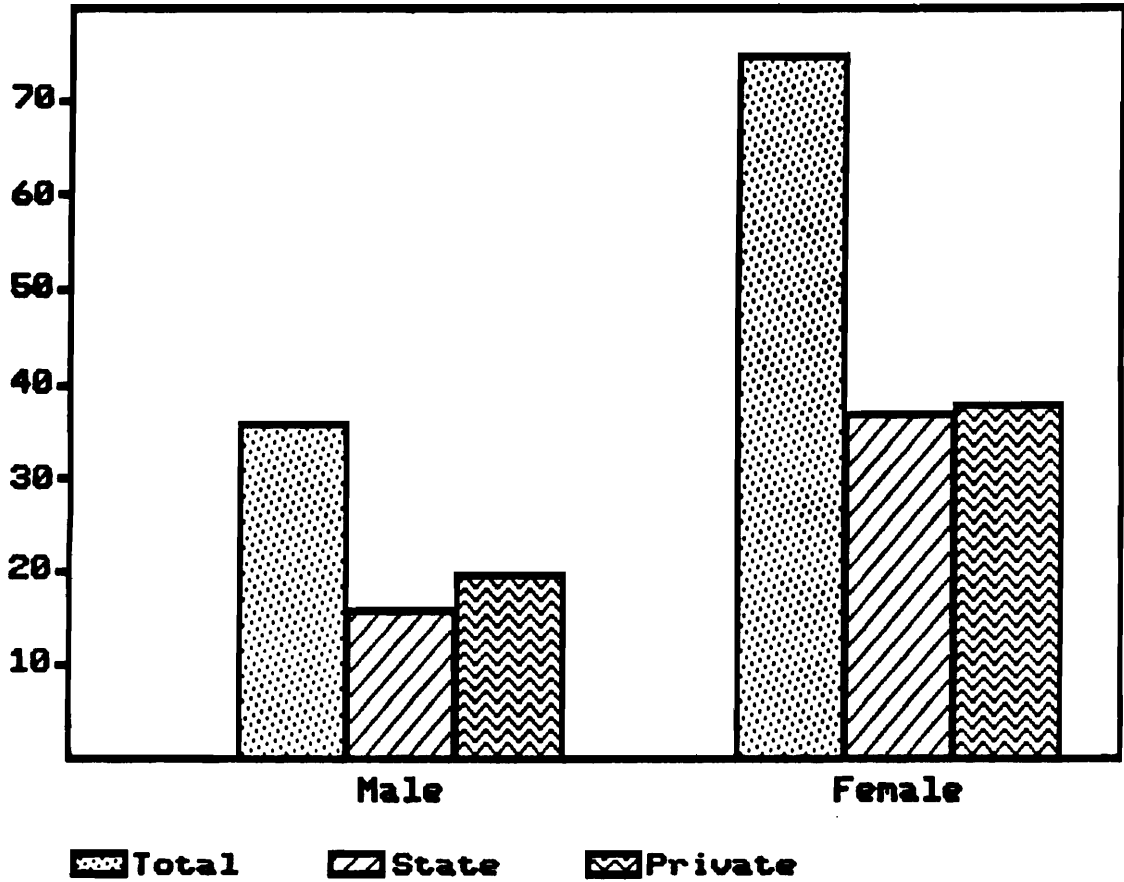
Thirty-two students (28.6%) were enrolled in Business; 26 (23.2%) were in Education, and 22 (19.6%) in Human Resource Development. There were 17 (15.2%) students in Counseling/Psychology, 10 (8.9%) in Nursing, 4 (3.6%) in Engineering, and 1 (.9%) in Liberal Studies.

A summary of the demographic variables in relation to the total group of respondents can be seen in Table 1. The demographic variables as categorized by school attended can be seen in Table 2.

### Years Worked in Current Occupation

The average number of years which the respondents had worked in their current occupation was 7.6 years. The range was from 1 year to 34 years. Further analysis by school which the respondents attended showed that for those from the state university, the average number of years worked in their current occupation was 10.1; for those from the private university, it was 5.5 years.

**GENDER of RESPONDENTS**



**FIGURE 2**  
Gender of Respondents

Table 1  
SUMMARY OF DEMOGRAPHIC VARIABLES:  
TOTAL GROUP OF RESPONDENTS

VARIABLE	N	%	CUM %
<b>AG</b>			
21-30	36	32.4	32.4
31-40	32	28.8	61.2
41-49	35	31.5	92.7
50-58	8	7.3	100.0
<b>GE</b>			
Male	36	32.4	32.4
Female	75	67.6	100.0
<b>MF</b>			
Business	32	28.6	28.6
Education	26	23.2	51.8
HRD	22	19.6	71.4
Nursing	10	8.9	80.3
C/P	17	15.2	95.5
Engineering	4	3.6	99.1
Liberal Studies	1	.9	100.0
<b>YW</b>			
01-06	66	58.9	58.9
07-13	24	21.4	80.4
14-20	17	15.2	95.5
21-34	5	4.5	100.0

AG = Age  
 GE = Gender  
 MF = Major Field of Study  
 HRD= Human Resource Development  
 C/P = Counseling/Psychology  
 YW = Years Worked in Current Occupation

Table 2

## DEMOGRAPHIC VARIABLES CATEGORIZED BY SCHOOL ATTENDED

VARIABLE	N	%	CUM %
<u>AG</u>			
<u>State</u>			
21-30	28	47.5	47.5
31-40	2	38.9	86.4
41-49	8	13.6	100.0
<u>Private</u>			
21-31	9	17.4	17.4
32-40	14	27.0	44.4
41-49	21	40.3	84.7
50-58	8	15.3	100.0
<u>GE</u>			
<u>State</u>			
Male	16	30.2	30.2
Female	37	69.8	100.0
<u>Private</u>			
Male	20	34.5	34.5
Female	38	65.5	100.0
<u>YW</u>			
<u>State</u>			
01-05	33	55.9	55.9
06-09	14	23.7	79.7
10-13	58	8.5	88.1
14-16	5	8.5	96.6
17-21	2	3.4	100.0
<u>Private</u>			
01-05	23	44.2	44.2
06-09	11	21.2	65.4
10-13	14	26.9	92.3
14-16	2	3.8	96.2
17-21	2	3.8	100.0

AG = Age

GE = Gender

YW = Years Worked in Current Occupation

### Relevancy to Work

Although these data were not utilized in hypothesis testing, the respondents were asked on the data sheet to rank the relevancy of their major studies to their future work. The item consisted of choices on a scale of one to five, with one being most related and five least related. This item was included because if the variable of years worked in current occupation had shown a statistically significant relationship to career maturity, the information in regard to relevancy of major studies might have led to interesting serendipitous findings. For example, if the career maturity of a person had been shown to have been related to years worked, then the major course of study might have revealed an influence on career maturity. This information might have been helpful to career and academic counselors in assisting graduate students to select courses and fields of study to further career maturity. Data showed that 53 students (47.3%) judged the courses most relevant, while 8 (7.2%) judged them least relevant. The remainder answered between the two extremes. It might be noted that although 53 percent of the respondents intended to change occupations, over 80 percent judged their course work to be related in some degree to their future occupations. A summary of the total results in regard to this item can be seen in Table 3.

**Table 3**  
**RELEVANCE OF MAJOR STUDIES**  
**TO FUTURE OCCUPATION**

RELEVANCE OF MAJOR STUDIES	N	%	CUM %
<u>Most related</u>	53	47.3	47.3
<u>Highly related</u>	25	22.3	69.6
<u>Related</u>	16	14.3	83.9
<u>Less related</u>	10	8.9	92.8
<u>Least related</u>	8	7.2	100.0

### Determination of Status

The primary purpose which was addressed in the study was to determine if those graduate students who were Career Changers were different from those who were Career Enhancers in relation to the ACCI stages. The distinction between the Career Changer and the Career Enhancer was accomplished in the following manner.

On the data sheets, the subjects were asked to indicate their reason for attending graduate school. A choice was offered between the following answers:

*"In order to enhance present job skills" and*

*"In order to prepare for a different occupation."*

Of the 112 respondents, 64 (57.1%) said they were in school to enhance their present job skills, while 48 (42.9%) said they were preparing for a change.

For purposes of analysis, the identification of those who were Career Changers and those who were Career Enhancers was taken from the demographic data sheet. However, a cross-check on this answer was provided in Question #61 of the ACCI, where respondents were asked to indicate their present status relating to career change. The 5 possible choices were:

1. *I am not considering making a career change.*
2. *I am considering whether to make a career change.*
3. *I plan to make a career change and am choosing a field to change to.*
4. *I have selected a new field and am trying to get started in it.*
5. *I have recently made a change and I am settling down in the new field.*

Respondents who answered #1 or #2 were considered to be Career Enhancers. Respondents who answered #3, #4, or #5 were considered to be Career Changers. Based on this, 65 (58%) of the respondents were considered Enhancers and 47 (42%) of the respondents were considered Changers. A summary showing the homogeneity of the responses of the groups to both questions can be seen in Table 4.

#### Age and Years in Current Occupation

Since the only variables that presented continuous scales were Age and Years Worked in Current Occupation, the means, medians, and standard deviations were determined for these variables (see Table 5). The mean age for Career Enhancers was 35.6, while for Career Changers, it was 35.1. The mean number of years worked by Enhancers in their current occupation was 7.5, while for Changers, it was 7.8.

Table 4  
 A COMPARISON OF RESPONSES:  
 CAREER CHANGERS VERSUS CAREER ENHANCERS

RESPONSES	CHANGERS		ENHANCERS	
	N	%	N	%
<u>Data Sheet</u>	48	42.9	64	57.1
<u>ACCI</u>	47	42.0	65	58.0

ACCI = Adult Career Concerns Inventory

Table 5  
 SUMMARY TABLE:  
 AGE AND YEARS WORKED IN CURRENT OCCUPATION

	ENHANCERS			CHANGERS		
	Mean	SD	Med	Mean	SD	Med
<u>AG</u>	35.6	9.6	34.5	35.1	11.1	37
<u>YW</u>	7.5	6.2	5.0	7.8	7.4	5

AG = Age

YW = Years Worked in Current Occupation

### Hypothesis Testing

This study investigated whether graduate students differed on the ACCI stages based on whether they intended to change careers or remain in their current occupations. Appropriate tests were applied to determine if there were statistically significant differences in career maturity between Enhancers and Changers in relation to the selected variables of age, gender, major field of study, and years worked in current occupation.

In this study, career maturity in adults was used in the sense of career adaptability. Within career development theory as proposed by Super (1988), persons were judged as being mature when they adequately functioned in their present developmental stage and when they were capable of and willing to moderate their work behavior as required.

As explained in Chapter 3 (see p. 50), the normative and ipsative medians of each of the four stages of the ACCI were used to determine whether a person was or was not engaged in tasks appropriate to that stage. The medians used for these determinations can be seen in Appendix D. Those who scored above the median were so engaged; those who scored below were not. For example, if a person scored higher than the median on the stage of EXploration, that person was concerned with the developmental tasks of that stage, such as discovering the kind of occupation he or she should seek.

In Null Hypothesis 1, differences between Career Enhancers and Career Changers in relation to the stages of the ACCI were considered:

Ho<sub>1</sub> There is no statistically significant difference as measured by The Adult Career Concerns Inventory between those graduate students who intend to enhance their careers and those who intend to change their careers.

In order to test for differences between Career Enhancers and Career Changers, an independent samples t test was performed for each of the two groups of respondents on each of the four stages of the ACCI.

At the Alpha level of .05, a statistically significant difference was found for Career Changers on the first stage, EXploration ( $p = .023$ ). Therefore, the null hypothesis Ho<sub>1</sub> was rejected.

As expected, the data results showed that the mean was higher for Changers on the stages of EXploration, 3.42 and DISengagement, 2.75 than for Enhancers, where the mean for EXploration was 2.98 and the mean for DISengagement was 2.55. The means in closest proximity were on MAintenance, where there was only a .01 difference. Thus, these results indicate that Changers were more deeply involved in EXploration and DISengagement behaviors than Enhancers and that both Enhancers

and Changers were interested in maintaining their respective positions.

Although not approaching significance, the probability closest to statistical significance was on Disengagement, where  $p = .315$ . The probability least close to statistical significance was on Maintenance, where  $p = .938$ . The total results from the testing of  $H_{01}$  can be seen in Table 6.

In Null Hypothesis 2, the relationship between age and career maturity was considered:

$H_{02}$  There is no statistically significant relationship between the age of the subjects and their career maturity.

In the study, SMT was used to refer to the normative measure of maturity based on the median scores of Exploration and Maintenance found in the Manual. RMT was used to refer to the ipsative measure of maturity derived from the median scores of the subjects on Exploration and Maintenance. Charts showing this complete process can be seen in Appendix D.

Table 6

**T TESTS FOR SIGNIFICANT DIFFERENCES OF MEANS  
ON ACCI STAGES FOR CAREER ENHANCERS AND CAREER CHANGERS**

	ENHANCERS		CHANGERS		p
	Mean	SD	Mean	SD	
<u>ACCI STAGES:</u>					
<u>EX</u>	2.98	.141	3.42	.127	.023*
<u>ES</u>	3.41	.118	3.34	.133	.687
<u>MA</u>	3.37	.105	3.36	.125	.938
<u>DI</u>	2.55	.115	2.75	.124	.315

\* p = < .05

ACCI = Adult Career Concerns Inventory

EX = Exploration stage

ES = Establishment stage

MA = Maintenance stage

DI = Disengagement stage

In order to determine the relationship between the continuous variable of age and the career maturity of the subjects as calculated in 4 different ways, regression analysis was utilized. At the Alpha level of .05, a statistically significant relationship was found between age and career maturity on both the normative scores, SMT ( $p = .008$ ) and on the ipsative scores, RMT ( $p = .005$ ). These regressions accounted for 6% and 7% of the variance respectively. Therefore, the null hypothesis  $H_{0_2}$  was rejected.

In the regression analysis, the statistical significance found was on the two measures of maturity (normative and ipsative) which were based on the two stages of EXploration and MAintenance. No significance was found on either measure of maturity based on the single stage of EXploration from either the normative scores (RM:  $p = .721$ ) or the ipsative scores (SM:  $p = .478$ ).

Both of these nonsignificant measures of maturity were based on the EXploration stage. This result indicated that the significant relationship was found with the addition of the MAintenance stage to the measure. This was reasonable since the regression showed a negative relationship, that is, as the subjects got older, the career maturity lessened. This was not surprising because all of the subjects were close together on MAintenance; that is, regardless of their designation as Career Enhancers

or Career Changers, they all were concerned with holding their present situation without regard to age. Age was not found to be a factor in the single median determinations of career maturity (RM and SM). These data are presented in Table 7.

Since a statistically significant relationship was found between age and the career maturity of the total group of subjects, a further analysis of the data was done in order to determine if the significance was directly related to Enhancers or Changers. With career maturity as the dependent variable, the independent variable of age was then applied in separate simple regressions to the group of Enhancers and the group of Changers.

The statistical significance discovered with the total group analysis for age and the measures of maturity was now seen to be related directly to the career enhancer in three of the four measures: SM ( $p = .038$ ), RMT ( $p = .008$ ), SMT ( $p = .007$ ). No significance was found for Career Enhancers on the ipsative measure RM ( $p = .766$ ). Thus, significance was found only for Enhancers on the normative single scale measure and on both the normative and ipsative two-scale measures of maturity.

Table 7  
 REGRESSION ANALYSIS OF AGE  
 IN RELATION TO THE CAREER MATURITY  
 OF THE TOTAL GROUP

MEASURES OF MATURITY				
	<u>RM</u>	<u>RMT</u>	<u>SM</u>	<u>SMT</u>
<u>AG</u>				
F	.130	7.310	.510	8.360
P	.721	.008*	.478	.005*
R <sup>2</sup>	.0012	.0628	.0046	.0713

\* p = < .05

AG = Age

Measures of Maturity:

RM = Ipsative on Exploration

RMT= Ipsative on Exploration & Maintenance

SM = Normative on Exploration

SMT= Normative on Exploration & Maintenance

In the total group regression, significance was found on 2 of the 4 measures of maturity, RMT ( $p = .008$ ) and SMT ( $p = .005$ ). The total group showed no significance on RM ( $p = .721$ ) or on SM ( $p = .478$ ). The significance in Career Enhancers with the measure of maturity SM was not strong enough to carry to the total group. The significance of RMT and SMT was closely related in both regressions. The  $p$  of the RMT was .008 for the total group, the same as the  $p$  for RMT of Enhancers only. The  $p$  of the SMT of the total group was .007, and the  $p$  of Enhancers only was .005. The results are shown separately in Table 8 for Career Enhancers and Career Changers.

The regression analysis did not consider the stages of EStablishment or DIsengagement because career maturity measures were centered on the stages of EXploration and MAintenance. It had been posited that Career Enhancers and Career Changers would be similar on the stage of EStablishment. The stage of DIsengagement was not utilized because the subjects of the study were currently working and not yet involved actively in this stage. Had these two stages been used, it would have been expected that age would not have been significant.

Table 8  
REGRESSION ANALYSIS OF AGE  
IN RELATION TO THE CAREER MATURITY  
OF CAREER ENHANCERS AND CAREER CHANGERS

		MEASURES OF MATURITY			
		RM	RMT	SM	SMT
<u>AG:</u>					
<u>CE</u>	F	.090	7.530	4.500	7.850
	P	.766	.008*	.038*	.007*
<u>CC</u>	F	.850	.970	2.420	1.470
	P	.361	.331	.127	.232

\*  $p = < .05$

AG = Age  
CE = Career Enhancer  
CC = Career Changer

Measures of Maturity:

RM = Ipsative on Exploration  
SM = Normative on Exploration  
RMT= Ipsative on Exploration & Maintenance  
SMT= Normative on Exploration & Maintenance

In Null Hypothesis 3, the relationship between gender and career maturity was considered:

Ho<sub>3</sub> There is no statistically significant relationship between the gender of the subjects and their career maturity.

In order to determine the relationship of the discrete variable of gender to the career maturity of graduate students, chi-square analysis was utilized. In applying chi-square, the relationship of gender to the four Measures of Career Maturity was tested.

At the Alpha level of .05, the following results were obtained: RM,  $p = .3205$ ; RMT,  $p = .9289$ ; SM,  $p = .8517$ ; SMT,  $p = .3585$ . The chi-square test showed no statistically significant relationship ( $p = < .05$ ) to any of the measures of career maturity in either the normative or the ipsative measures. Therefore, the null hypothesis Ho<sub>3</sub> was not rejected.

In regard to the relationship between gender and career maturity, the measure of maturity that was closest to significance was RM (the ipsative measure based on EXploration,  $p = .3205$ ), and the farthest from significance was RMT (the ipsative measure based on EXploration and MAintenance,  $p = .9289$ ).

In Null Hypothesis 4, the relationship between major field of study and career maturity was considered:

H<sub>0</sub>, There is no statistically significant relationship between the subjects' major field of study and their career maturity.

Chi-square analysis was utilized to determine the relationship of the discrete variable of major field of study to the career maturity of graduate students. In applying chi-square, the relationship of major field of study to the four Measures of Career Maturity was tested.

At the Alpha level of .05, the following results were obtained: RM,  $p = .5860$ ; RMT,  $p = .9578$ ; SM,  $p = .8829$ ; SMT,  $p = .7209$ . Chi-square indicated no statistically significant relationship ( $p = <.05$ ) between major field of study and any of the measures of career maturity in either the normative or the ipsative groups. Therefore, the null hypothesis H<sub>0</sub> was not rejected.

For major field of study in relation to career maturity, the measure of maturity that was closest to significance was RM ( $p = .5860$ ). The farthest from significance was RMT ( $p = .9578$ ). Table 9 contains a complete view of the data results pertaining to hypotheses 3 and 4.

TABLE 9  
 CHI-SQUARE ANALYSIS:  
 GENDER AND MAJOR FIELD OF STUDY  
 IN RELATION TO THE MEASURES OF MATURITY

	MM	Chi-Square	df	p
<b><u>VARIABLE:</u></b>				
<b><u>GE</u></b>	RM	0.9868	1	.3205
	RMT	0.0083	1	.9289
	SM	0.0349	1	.8517
	SMT	0.8433	1	.3585
<b><u>MF</u></b>	RM	10.3419	12	.5860
	RMT	5.0061	12	.9578
	SM	6.5988	12	.8829
	SMT	8.7878	12	.7209

$p = < .05$

- GE = Gender  
 MF = Major Field of Study  
 MM = Measures of Maturity:  
 RM = Ipsative on Exploration  
 RMT = Ipsative on Exploration & Maintenance  
 SM = Normative on Exploration  
 SMT = Normative on Exploration & Maintenance

In Null Hypothesis 5, the relationship between the independent variable of years worked in current occupation and the dependent variable of career maturity was considered:

H<sub>05</sub> There is no statistically significant relationship between the subjects' number of years worked in their current occupation and their career maturity.

In order to determine the relationship between the number of years worked in current occupation to the career maturity of the subjects as calculated in four different ways, regression analysis was utilized.

At the Alpha level of .05, no statistically significant relationship was found between years worked in current occupation and career maturity on any of the measures of maturity: RM,  $p = .521$ ; RMT,  $p = .970$ ; SM,  $p = .920$ ; SMT,  $p = .642$ . Therefore, the null hypothesis H<sub>05</sub> was not rejected.

Although no significance was found in the regression analysis of years worked in current occupation to career maturity, it should be noted that the measure closest to being significant (RM,  $p = .521$ ) as well as the measure farthest from significance (RMT,  $p = .967$ ) were both derived from the ipsative group in which the measures of maturity were derived from the medians of the respondents. These data are presented in Table

10 and might be interpreted to mean that career maturity is independent of time in an occupation.

### Summary of Findings

The following is a summary of the results of the data analysis:

Since a statistically significant difference was found between Career Enhancers and Career Changers in the EXploration stage of the ACCI,  $H_{o_1}$  was rejected.

Since a statistically significant relationship was found between age of the subjects and their career maturity,  $H_{o_2}$  was rejected.

Since no statistically significant difference was found between gender or major field of study and career maturity,  $H_{o_3}$  and  $H_{o_4}$  were not rejected.

Since no statistically significant difference was found between years worked in current occupation and career maturity,  $H_{o_5}$  was not rejected.

Table 10  
 REGRESSION ANALYSIS OF  
 YEARS WORKED IN CURRENT OCCUPATION  
 IN RELATION TO CAREER MATURITY

	MEASURES OF MATURITY			
	RM	RMT	SM	SMT
<u>YW</u>				
F	.410	.000	.010	.220
P	.521	.970	.920	.642

$p = < .05$

AG = Age

YW = Years Worked

Measures of Maturity:

RM = Ipsative on Exploration

RMT = Ipsative on Exploration & Maintenance

SM = Normative on Exploration

SMT = Normative on Exploration & Maintenance

Chapter 5 contains conclusions based upon the results of the data analysis. Discussion and implications for counseling and education are included as well as recommendations for further study.

## CHAPTER 5

### Summary and Discussion, Conclusions, Recommendations and Implications

In this chapter, a summary of the study is presented, followed by a discussion of the findings, conclusions, recommendations for further study, and implications.

#### Summary

The purpose of this study was to determine if there was a difference in career maturity between graduate students who intended to change careers and those who intended to enhance their present careers. The major factor investigated was the measure of career maturity defined by Super et al. (1988) as the capability to adapt to the present career demands and an openness to looking ahead in "one's work and working life" (p. 5). In addition, the selected variables of age, gender, major field of study, and years worked in current occupation were investigated in relation to the career maturity of graduate students.

An extensive search of relevant data bases revealed few studies which focused on career maturity for the graduate student and none which focused on the combination of selected variables which were investigated in this study. This was especially true if the median age of the graduate

student was beyond the mid-twenties and if the graduate student was actively engaged in work, as was the case in this study.

The survey method was used for the collection of data in this descriptive study. Subjects for the study were selected by proportional random sampling (Hinkle et al., 1979) from two universities, one private and one state-supported. Graduate students attending during the summer semester of 1989 were the respondents. The instruments used were a data sheet developed by the investigator and the ACCI (Super et al., 1988). Data were analyzed by means of chi-square, t tests, and regression.

This study investigated graduate students who were divided according to their status as Career Enhancers or Career Changers. In the t test applied to Career Enhancers versus Career Changers, a statistically significant difference was found on the Establishment stage of the ACCI; therefore,  $H_{0_1}$  was rejected. In the regression analysis, a statistically significant relationship was found between age and career maturity; therefore  $H_{0_2}$  was rejected. In the chi-square analysis, no statistically significant relationship was found between gender or major field of study and career maturity; therefore,  $H_{0_3}$  and  $H_{0_4}$  were not rejected. In the regression analysis, no statistically significant relationship was found

between years in current occupation and career maturity; therefore  $H_0$  was not rejected.

In summary, the findings of this study showed a statistically significant difference between the career maturity of Career Enhancers and Career Changers on the ACCI stage of EXploration and also a statistically significant relationship between age and career maturity. However, there was no statistically significant relationship between gender, major field of study, or years worked in current occupation and the career maturity of graduate students.

### Discussion

Significant findings of this study showed that graduate students who were Career Enhancers differed from graduate students who were Career Changers. Those in a change situation were more involved in tasks generally associated with the EXploration stage, such as seeking to know about differing occupations, attempting to determine what area to be followed, and actually beginning work in a chosen field. This was not an unexpected finding since it would seem that the Career Changer rather than the Career Enhancer would be involved in such endeavors.

This finding could be utilized by those directly involved in counseling graduate students. In counseling those identified as Changers,

help might be offered through group sessions concerning careers, testing might help in the determination of compatibility of personality and/or interest with career choices, and assistance could be given in evaluating potential occupations. Career Changers could also be assisted by introducing them to computer networking where they might gain exposure to potential employers. It would seem that graduate students searching for new careers would have career counseling needs different from those of graduate students who are seeking to solidify their present occupational situations. This finding reflects the conclusions put forth by McCaffrey et al. (1984) that graduate students have specific career counseling needs. The differences found were related to one of the four stages of the ACCI, that of EXploration. According to Super's interpretation (1988) of these stages, a person who is presently engaged in the area of investigating potential career choices is considered to be in the same category developmentally as the adolescent who is first encountering the possibility of making a decision concerning a career. It might even be said that the Career Changer is reliving an earlier state of his or her decision-making and exploration.

The Career Enhancers are not without needs. A career counselor could be helpful in supporting these persons in continuation of their

present career paths by offering encouragement, assisting them in further defining and focusing on career goals, and relating their occupational and nonoccupational roles. For example, a successful teacher planning to remain in the educational profession may combine teaching with being a parent, a homemaker, and also a consultant. Although all of these roles are centered in a single person, the different aspects could be interrelated with, and bear great influence on, the person's primary occupational role of teacher. It is in this sense, then, that the Career Enhancer is not a finished product. The Career Enhancer continues to grow, to change, and to seek self-fulfillment.

The traditional concept of the graduate student as one who has done career exploring, made career decisions, and has little need for guidance or career counseling, as cited by Tyler (1984) and Goodman (1984), was not supported by the finding concerning the stage of EXploration. This finding agrees with those of Minor (1980) and Clark (1980) who reported that these students needed guidance in relation to career goals.

Regarding the career concern stages of stabilizing or consolidating an occupation (EStablishment), seeking to hold a position (MAintenance), or starting to reduce involvement in the work situation (DIengagement),

no differences were found among the graduate students who were examined.

The results of this study indicated that age had a statistically significant relationship to career maturity on the part of Career Enhancers. It should be noted that this was a negative relationship to career maturity, that is, the older the person, the less he or she is willing to change or adapt. Career maturity was used in the context of adaptability and not as having reached a certain age. Thus, the independent variable of age showed a relationship to career maturity in that as the subject grew older, career maturity, as defined in this study, was less present. This finding, at first perhaps surprising, seems reasonable upon remembering that Career Enhancers and Career Changers were the subjects utilized. As they advanced in age, those who were Career Enhancers perhaps became more and more reticent to change their positions and had no need to plan for changes which they neither anticipated nor sought.

On the other hand, the number of years spent in a particular occupation revealed no relationship to maturity. In this study, longevity on the job was not an indicator of either a worker's capabilities or willingness to adapt to changing situations.

Similarly, gender was revealed as having no significant relationship to career maturity. For both men and women, there was no statistically significant relationship between their gender and career maturity. This finding of no gender difference was not in agreement with the findings of Fitzgerald and Cherpas (1985) who found that gender-based stereotypes, long known to function as barriers to women's development, also function reciprocally as barriers to the career development of men. Cesarano-Delacruz (1985) found that males had significantly higher career planning and career development attitude scores than did females. However, it did support the findings of Harris (1986) whose study showed that there were no gender differences among his subjects in regard to aspirations.

In relation to gender, it should be noted that there was a disparity in distribution among the subjects of this study. Of those who returned the questionnaires and answered the item concerning gender, 75 of the subjects were women and 36 were men. This, then, might suggest that further examination of the relationship of gender to career maturity of graduate students be done. It might prove interesting to determine if a more balanced group of men and women or a predominantly male group would show the same results.

The major field of study of the subjects, ranging over seven distinguishable areas of academic focus, manifested no relationship to the career maturity of graduate students. This might indicate that the subjects exhibited career maturity regardless of their course of study. Again, upon reflection, this was not a surprising finding if one considers that a field of study could have been chosen for reasons not relating to careers.

Finally, years worked in current occupation revealed no significant relationship to career maturity. This finding would seem to indicate that longevity on a given job did not necessarily bring with it career maturity nor did only a few years in an occupation necessarily mean that the incumbent did not have career maturity.

### Recapitulation

One result from this study showed that graduate students differed among themselves on the basis of their motivation for attending graduate school. It would seem to be important for career counselors and graduate school educators to remember that in providing services to these students, they are seeing a group with differing needs and at differing levels of career development.

Furthermore, among older graduate students, especially those who are seeking to enhance a career, the career maturity in many cases may be

the opposite of those seeking to change their present position. As the graduate student grows older, the career maturity of the Career Enhancer decreases as the individual becomes less adaptable to occupational needs and less concerned with planning to meet future job requirements. Therefore, counselors and educators of these students should be aware of the role that age plays in relation to career maturity and should not make assumptions regarding the career maturity of these students.

The study revealed that there was no statistically significant relationship between gender, field of study, or years worked in current occupation and career maturity. This might indicate that the counselor and educator should not place too much emphasis on these factors when considering the career maturity of graduate students. However, these variables do play a meaningful role in the lives of the graduate students and as such must not be totally disregarded. Future studies which use larger samples and further distinctions among subjects might well show that a significant role is played by one or more of these variables in relation to the career maturity of graduate students.

### Conclusions

The key to this study was an understanding of Super's concept (1988) that career maturity is the ability of a person to meet the needs of

the career developmental level at the present stage of life. In this study, the following conclusions were derived from the analysis of the data:

1. There was a difference in career maturity stages between graduate students who pursued a degree with the intention of enhancing their present occupations and those who matriculated with the intention of changing their present career to another.

2. In regard to Career Enhancers, the older the student becomes the less adaptable he or she might become to career change and challenge. The age of the Career Changers showed no relationship to their career maturity.

3. There was no gender difference regarding career maturity. The latter was present or lacking equally among men and women.

4. The graduate student's major field of academic concentration was not related to his or her career maturity.

5. The length of time spent in a given occupation had no relationship to career maturity. A person who has newly begun a career may be just as mature as one who has been working in the same career for many years.

6. Additional studies should be conducted using the ACCI so that the instrument's reliability and validity can be strengthened.

### Recommendations

In light of the findings of this study, recommendations concerning future action are as follows:

1. Additional studies of the career maturity of graduate students in professional schools such as medicine or law could be undertaken to assist in establishing if those in profession-specific educational settings have aspects of motivation which would impact on career maturity.

2. A study of graduate students could be conducted to determine the relationship between the additional variables of cultural differences, economic status, and racial/ethnic backgrounds to career maturity.

3. A study should be done concerning the career maturity of graduate students who are engaged in courses of study which are not directly related to their work setting, such as pure science, liberal studies, and research.

### Implications

Career counselors may be able to use the findings of this study in addressing the needs of adult clients who are planning to attend or who are presently enrolled in graduate school. A primary determination could be made regarding their reasons for attendance. Because change in many instances has been a cause of anxiety and resistance, those who are in

school in order to change occupations may be more apt to need career counseling. Particular areas of concern where assistance might be needed are: exploring new fields, gaining confidence in the pursuit of a new career, and transferring previously learned and used skills into marketable qualities. A career counselor is better able to help a client when these concerns are recognized.

As career counselors assist older clients, they should be aware that the adaptability and willingness to cope with the tasks associated with one's present situation have a tendency to decline with age. Therefore, additional care and concern should be given the older client to recognize present needs and their capabilities to adapt to them. A more detailed approach may sometimes be necessary to assist the older client in persevering in the quest for a new career.

The study indicated no difference in career maturity between men and women. Thus, helpers should make special efforts to avoid bias in assisting all students to reach their goals of career change or career enhancement. They should offer support and assistance to students in their desire to reach their goals and avoid stereotyping in offering information about career opportunities.

Not only career counselors but educators as well might be influenced by the outcomes of this study. Those planning curricula for adult graduate students could be encouraged to offer courses or seminars in career-centered topics which might give assistance to the adult student contemplating a career change or seeking to enhance a career. In the planning of individual study objectives, faculty advisors could also take into account the student's goal of career enhancement or career change.

Graduate students of nontraditional age are a growing population. They have special needs which require special assistance in order to attain goals. Counselors and educators are in an unique position to help them whether they are Career Enhancers or Changers.

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## APPENDICES

**APPENDIX A**  
**DATA SHEETS**

**DATA SHEET-A**

Please check answers and/or provide information requested.

1. My program major in graduate school is:

A. Business Administration with concentration in:

1. \_\_Accounting and Finance
2. \_\_Economics
3. \_\_Mangement
4. \_\_MIS
5. \_\_Management Science
6. \_\_Organizational Behavior & Personnel Mgt.
7. \_\_General Business

B. Education and Human Services

1. \_\_Human Resource Development
2. \_\_Human Resource Mangement
3. \_\_K-8th Grade Education
4. \_\_Secondary Program
5. \_\_Instructional Supervisory Program

C. Nursing

1. \_\_Nursing Administration
2. \_\_Nursing Education
3. \_\_Gerontological Nursing

D. Liberal Arts

E. Psychological Services

2. Please check the reason that more closely describes why you are attending graduate school.

In order to enhance my present job skills.

In order to prepare myself for a different occupation.

3. To what extent do you view the subjects you are studying in your degree program as directly relating to your future work?

On a scale of 1–5 with 1 being MOST RELEVANT and 5 being LEAST RELEVANT:

1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

4. How long have you worked in your current occupation?

Year(s) and  Month(s).

5. Do you intend to remain in your present occupation?

Yes  No

DATA SHEET-B

Please check answers and/or provide information requested.

1. My program major in graduate school is:
  - A. College of Business
    - 1.\_\_Accounting
    - 2.\_\_Finance
    - 3.\_\_Management
    - 4.\_\_Marketing
  - B. College of Education
    - 1.\_\_Adult and Continuing Education
    - 2.\_\_Educational Administration
    - 3.\_\_Admin. & Educational Services
    - 4.\_\_Curriculum and Instruction
    - 5.\_\_Research and Evaluation
    - 6.\_\_Vocational-Technical
    - 7.\_\_Counselor Ed. & Student Personnel
  - C. College of Human Resources
    - 1.\_\_Family and Child Development
    - 2.\_\_Human Nutrition and Foods
    - 3.\_\_Public Administration and Policy
  - D. College of Engineering

2. Please check the reason that more closely describes why you are attending graduate school.

In order to enhance my present job skills.

In order to prepare myself for a different occupation.

3. To what extent do you view the subjects you are studying in your degree program as directly relating to your future work?

On a scale of 1–5 with 1 being MOST RELEVANT and 5 being LEAST RELEVANT:

1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

4. How long have you worked in your current occupation?

Year(s) and  Month(s).

5. Do you intend to remain in your present occupation?

Yes  No

**APPENDIX B**  
**LETTER OF INTRODUCTION**



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

COLLEGE OF EDUCATION — NORTHERN VIRGINIA GRADUATE CENTER

Name of Study: Graduate Students and Career Maturity:  
Changers vs. Enhancers

Investigator: Raymond J. Haddad

Supervisor: Dr. Johnnie Miles

Phone Number: (To call if questions arise):  
Raymond Haddad (703) 354-5051

Dear Graduate Student:

I am presently deep into preparing a dissertation to complete my doctoral studies at VPI. For this to be done, I need your help. The proposed dissertation will focus on graduate students and their motivations and intentions in attending graduate school. There are two instruments to measure these factors. The first is a one page data sheet. The second is a two page instrument designed by Dr. Donald Super (who is presently teaching at Blacksburg).

You have been selected as part of a random sample and your cooperation is vital if the data are to be meaningful. Please take 15 to 20 minutes of your time to help.

The package you received has five pages:

1. This letter.

Please return the following:

2. A consent form required by Tech.

3. The data sheet.

4. The ACCI question sheet with profile on reverse which you do NOT complete.

5. The ACCI answer sheet which you fill out completely except for question 2 (your name).

The data will be aggregated and the respondents are guaranteed anonymity. The signed consent form will be separated from the answer sheets before any tallying is done.

When you have completed the instruments, please place them in the drop box slot at the registrar's office on the second floor. Thanks for your assistance. I will be glad to inform you of the results of the study.

Gratefully yours,

Raymond J. Haddad

**APPENDIX C**  
**CONSENT FORM**



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

COLLEGE OF EDUCATION — NORTHERN VIRGINIA GRADUATE CENTER

INFORMED CONSENT AGREEMENT

I understand that the information I am providing is to be used as part of a dissertation in Counselor Education at Virginia Polytechnic Institute. I understand that no information provided by me will ever be linked with my name.

I also understand that I do not have to provide any identifying information about myself and that no one other than Raymond Haddad and his Research Assistant will ever see any of the forms on which I provide my answers. All data obtained through participation in this study will be identified by code number so that anonymity and confidentiality will be ensured.

Furthermore, I understand that no analysis will be done that deals with my responses alone and that all data will be grouped for purposes of analysis. Once the data are grouped, the individual format that I provided will no longer be used and will be destroyed.

There are no risks involved in participating in this study. The only inconvenience will be the amount of time required to complete the questionnaires. While there are no immediate benefits, the results of this study may help the counseling profession to better understand the needs of graduate students and the motivations that bring them to graduate school.

Participation in this study is completely voluntary and I may withdraw from the study at any time.

After its completion, the results of this study will be available to me.

I therefore agree to participate in this research project.

Signed \_\_\_\_\_

Date \_\_\_\_\_

**APPENDIX D**  
**MEASURES OF MATURITY SHEETS**

**DETERMINATION OF MATURITY USING SCALES FROM ACCI**

**KEY:**

**EC = Enhancer/Changer**

EC = 1: Career Enhancer

EC = 2: Career Changer

EX = Exploration Scale

MA = Maintenance Scale

**MT = Career Maturity**

MT = 1: Mature

MT = 0: Not Mature

It was posited that a Career Enhancer will be low in EX- ploration and high in MAintenance. The Career Changer will be high in EXploration and low in MAintenance. Thus, using the Median as a line of demarcation, the level of "Career Maturity" was established.

**Career Maturity Measures Based on**

**EXploration and MAintenance Scales of ACCI**

**GROUP I** (<35 years of age)

- A. If EC = 1 and EX < 3.41 and MA > 3.4, then MT = 1.  
If EC = 1 and EX < 3.41 and MA < 3.4, then MT = 0.
- B. If EC = 2 and EX > 3.41 and MA < 3.4, then MT = 1.  
If EC = 2 and EX < 3.41 and MA > 3.4, then MT = 0.

GROUP II (35 to 45 years of age)

- A. If  $EC = 1$  and  $EX < 2.62$  and  $MA > 3.19$ , then  $MT = 1$ .  
 If  $EC = 1$  and  $EX > 2.62$  and  $MA < 3.19$ , then  $MT = 0$ .
- B. If  $EC = 2$  and  $EX > 2.62$  and  $MA < 3.19$ , then  $MT = 1$ .  
 If  $EC = 2$  and  $EX < 2.62$  and  $MA > 3.19$ , then  $MT = 0$ .

GROUP III (>45 years of age)

- A. If  $EC = 1$  and  $EX < 2.22$  and  $MA > 3.2$ , then  $MT = 1$ .  
 If  $EC = 1$  and  $EX > 2.22$  and  $MA < 3.2$ , then  $MT = 0$ .
- B. If  $EC = 2$  and  $EX > 2.22$  and  $MA < 3.2$ , then  $MT = 1$ .  
 If  $EC = 2$  and  $EX < 2.22$  and  $MA > 3.2$ , then  $MT = 0$ .

Career Maturity Measures Based onACCI EXploration Scale AloneGROUP I (<35 years of age)

- A. If  $EC = 1$  and  $EX < 3.41$ , then  $SM = 1$ .  
 If  $EC = 1$  and  $EX > 3.41$ , then  $SM = 0$ .
- B. If  $EC = 2$  and  $EX > 3.41$ , then  $SM = 1$ .  
 If  $EC = 2$  and  $EX < 3.41$ , then  $SM = 0$ .

**GROUP II** (35 to 45 years of age)

- A. If  $EC = 1$  and  $EX < 2.62$  , then  $SM = 1$ .  
If  $EC = 1$  and  $EX > 2.62$  , then  $SM = 0$ .
- B. If  $EC = 2$  and  $EX > 2.62$  , then  $SM = 1$ .  
If  $EC = 2$  and  $EX < 2.62$  , then  $SM = 0$ .

**GROUP III** (>45 years of age)

- A. If  $EC = 1$  and  $EX < 2.22$  , then  $SM = 1$ .  
If  $EC = 1$  and  $EX > 2.22$  , then  $SM = 0$ .
- B. If  $EC = 2$  and  $EX > 2.22$  , then  $SM = 1$ .  
If  $EC = 2$  and  $EX < 2.22$  , then  $SM = 0$ .

A further refinement of the data was accomplished by using the medians derived from the collected data. This approach is according to definition of "ipsative" used by Super in the instrument manual (p.54).

Career Maturity Based on

EXploration and MAintenance Scales of the Study

GROUP I (<35 years of age)

- A. If  $EC = 1$  and  $EX < 3.4$  and  $MA > 3.6$ , then  $MT = 1$ .  
 If  $EC = 1$  and  $EX > 3.4$  and  $MA < 3.6$ , then  $MT = 0$ .
- B. If  $EC = 2$  and  $EX > 3.4$  and  $MA < 3.6$ , then  $MT = 1$ .  
 If  $EC = 2$  and  $EX < 3.4$  and  $MA > 3.6$ , then  $MT = 0$ .

GROUP II (35 to 45 years of age)

- A. If  $EC = 1$  and  $EX < 3.05$  and  $MA > 3.15$ , then  $MT = 1$ .  
 If  $EC = 1$  and  $EX > 3.04$  and  $MA < 3.15$ , then  $MT = 0$ .
- B. If  $EC = 2$  and  $EX > 3.04$  and  $MA < 3.15$ , then  $MT = 1$ .  
 If  $EC = 2$  and  $EX < 3.04$  and  $MA > 3.15$ , then  $MT = 0$ .

GROUP III (>45 years of age)

- A. If  $EC = 1$  and  $EX < 2.65$  and  $MA > 3.25$ , then  $MT = 1$ .  
 If  $EC = 1$  and  $EX > 2.65$  and  $MA < 3.25$ , then  $MT = 0$ .
- B. If  $EC = 2$  and  $EX > 2.65$  and  $MA < 3.25$ , then  $MT = 1$ .  
 If  $EC = 2$  and  $EX < 2.65$  and  $MA > 3.25$ , then  $MT = 0$ .

The above determination was calculated using the two stages of EXploration and MAintenance while the following determination is based on median of Exploration alone.

Career Maturity Based on EXploration Scale Alone

> or < than Median of Collected data

GROUP I (<35 years of age)

- A. If  $EC = 1$  and  $EX < 3.4$  , then  $RM = 1$ .  
If  $EC = 1$  and  $EX > 3.4$  , then  $RM = 0$ .
- B. If  $EC = 2$  and  $EX > 3.4$  , then  $RM = 1$ .  
If  $EC = 2$  and  $EX < 3.4$  , then  $RM = 0$ .

GROUP II (35 to 45 years of age)

- A. If  $EC = 1$  and  $EX < 3.05$  , then  $RM = 1$ .  
If  $EC = 1$  and  $EX > 3.05$  , then  $RM = 0$ .
- B. If  $EC = 2$  and  $EX > 3.05$  , then  $RM = 1$ .  
If  $EC = 2$  and  $EX < 3.05$  , then  $RM = 0$ .

GROUP III (>45 years of age)

- A. If  $EC = 1$  and  $EX < 2.65$  , then  $RM = 1$ .  
If  $EC = 1$  and  $EX > 2.65$  , then  $RM = 0$ .
- B. If  $EC = 2$  and  $EX > 2.65$  , then  $RM = 1$ .  
If  $EC = 2$  and  $EX < 2.65$  , then  $RM = 0$ .

## VITA

Raymond J. Haddad

### PERSONAL DATA

**BIRTHPLACE:** Boston, Massachusetts  
**SPOUSE:** Nina A. Haddad  
**ADDRESS:** 4541 Ravensworth Road,  
Annandale, VA 22003  
**PHONE:** 703-354-5051

### EDUCATION

1990	Virginia Polytechnic Institute and State University Blacksburg, Virginia	Ed.D, Student Personnel Services
1979	American University Washington, DC	MPA, Public Administration
1955	Aquinas Institute River Forest, Illinois	MA, Philosophy

### PROFESSIONAL EXPERIENCE

1984 – 1989	Marymount University Arlington, Virginia	Director, Graduate Career Center
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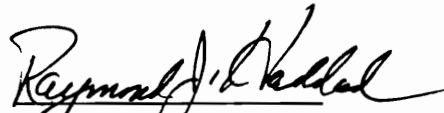
1983	Washington, DC	Adjunct Professor, Philosophy Relocation Consultant
1981 – 1982	Marymount University Arlington, Virginia	Adjunct Professor, Business
1970 – 1980	Department of Housing and Urban Development Washington, DC	Relocation Specialist
1969 – 1970	Department of Housing and Urban Development Chicago, Illinois	Acting Director, Relocation Division
1967–1968	Houston Medical Center Houston, Texas	Founder and Director, Catholic Center for Counseling
	Rice University Houston, Texas	Director, Catholic Student Center
1961–1966	Southeastern Louisiana University, Hammond, Louisiana	Founder and Director, Catholic Student Center; Student Housing Program
1959–1961	St. Joseph's Church Ponchatoula, Louisiana	Assistant Pastor

PROFESSIONAL ORGANIZATIONS

American Academy of Political Science  
American Association for Counseling and Development  
College Placement Council  
Mid-Atlantic Placement Council  
National Career Development Association  
National Employment Counselors Association  
Phi Delta Kappa  
Virginia Counselors Association  
Washington Area Society of Association Executives

COMMUNITY SERVICE ORGANIZATIONS

American Diabetes Association  
Anchor Mental Health, Washington, DC  
Northern Virginia Mental Health Association

  
Raymond J. Haddad