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The Impact of Gender and Rank on Job Satisfaction Among Rehabilitation Counselor Educators

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THE FLORIDA STATE UNIVERSITY
COLLEGE OF EDUCATION

THE IMPACT OF GENDER AND RANK ON JOB SATISFACTION AMONG
REHABILITATION COUNSELOR EDUCATORS

By
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I dedicate this dissertation to my parents, Arthur and Grace Olsen, for their unwavering support of my education throughout my life.

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TABLE OF CONTENTS

List of Tables.....	viii
List of Figures.....	ix
Abstract.....	x
INTRODUCTION.....	1
Statement of the Problem	4
Significance of the Study	6
Theoretical Base	7
Purpose of the Study	9
Research Questions	9
Operational Definitions of Variables	10
REVIEW OF THE LITERATUIRE.....	13
Historical Perspective	13
Needs and Satisfaction	14
Values and Disposition	16
Theoretical Framework	18
Two-Factor Theory of Job Satisfaction	19
Criticism of Two-Factor Theory	22
Summation of Theory	23
Job Satisfaction	24
Job Satisfaction and Higher Education	26
Satisfiers and Dissatisfiers	27
Intent to Leave	28
Two-Factor Theory and Higher Education	29
Women Faculty and Job Satisfaction	30
Factors	31
Gender Differences	33
Job Satisfaction & Rehabilitation Counselor Educators	34
Importance	37

Conclusion	37
METHODOLOGY.....	40
Research Design	40
Hypotheses	41
Variables	41
Participants	42
Response Rate	44
Description of the Sample	45
Instruments	46
Reliability and Validity	47
Variables	48
Procedure	49
Data Analysis	50
RESULTS	52
Descriptive Results	52
Inferential Results	59
Summary of Findings	63
DISUSSION.....	64
Gender, Rank, and Job Satisfaction	65
Gender and Job Satisfaction	65
Academic Rank and Job Satisfaction	65
Factors of the Job	67
Gender, Academic Rank and Job Factors	68
Conclusion	69
Limitations of the Study	70
Further Research Recommendations.....	71
 APPENDIX A: Modifications to Wood's Faculty	
Satisfaction/Dissatisfaction Scale.....	72

APPENDIX B: Modified Wood's Faculty Satisfaction/Dissatisfaction Scale.....	76
APPENDIX C: IRB Approval and Revision	88
APPENDIX D: Informed Consent.....	92
APPENDIX E: Letter to Faculty.....	96
APPENDIX F: NCRE Approval.....	98
REFERENCES	108
BIOGRAPHICAL SKETCH	122

LIST OF TABLES

Table 1: Respondents and Actual Participants.....	46
Table 2: Descriptive Statistics Demographics.....	54
Table 3: Intrinsic Motivators, Extrinsic Motivators, Job Satisfaction, Job Dissatisfaction.....	56
Table 4: Correlations.....	57
Table 5: Regression Analysis One.....	60
Table 6: Regression Analysis Two.....	62

LIST OF FIGURES

FIGURE 1: Standardized Regression Residuals	100
FIGURE 2: Estimated Marginal Means for Intrinsic Motivation Scores as a Function of Rank.....	102
FIGURE 3: Estimated Marginal Means for Extrinsic Scores as a Function of Rank.....	104
FIGURE 4: Standardized Regression Residuals	106

ABSTRACT

The intention of this study was to examine the impact of gender and rank on job satisfaction among rehabilitation counselor educators. Women are now earning doctorates at a greater percentage than men and are the majority of faculty at community colleges and four year liberal arts colleges. However, women still lag behind men in terms of salary, tenure and promotion. Women are also more likely to leave academic appointments at a higher rate than male faculty. One of the key factors of leaving a position is job satisfaction. Research has indicated that female and male faculty both are usually satisfied with their job, but women are more dissatisfied with aspects of the job than men. This study utilized Herzberg's two factor theory of motivation for work. Herzberg, in his study of worker motivations, determined that job satisfaction is not on a continuum but actually two distinct continuums. This study explored whether there are differences among faculty regarding job satisfaction, or intrinsic factors of the job, or job dissatisfaction, or extrinsic factors of the job. The results demonstrated those both male and female faculties were satisfied with their jobs and there was no significant difference between men and women in extrinsic and intrinsic factors of the job. However, intrinsic factors of the job were more predictive of job satisfaction than extrinsic factors.

CHAPTER ONE

INTRODUCTION

Job satisfaction and faculty at institutions of higher education has been a topic of discussion for decades. Why faculty are satisfied or dissatisfied with their job and what factors of the job have financial implications for the institutions they work at and individual implications. At this time universities are seeing changes in government funding and more students attending college. Retaining quality faculty has become more important than ever.

Many researchers assert that higher education is facing a nation-wide crisis (Peterson, 2007; Schuster & Finkelstein, 2007). University faculty are faced with sweeping changes due to budgetary concerns and/or the political climate both at the state and national level. Faculty at institutions of higher education in the United States are seeing changes in their job status and security. A trend in some universities is to discontinue tenure. Tenure status is usually followed by a probationary status of six to ten years. Once earned, it is often considered a lifelong appointment which allows for academic freedom in the classroom (Adams, 2006). With more institutions considering abolishing the tenure system, faculty are increasingly worried about job security and their academic freedom.

A sense of job insecurity comes at a time when there is a need for more faculty. Tack and Patitu (1992) predicted a shortage of university faculty across all fields of study by the year 2000. Moreover, the Southern Regional Education Board predicted there will be a need for 32% more faculty in 2014 due to increases in student enrollment and attrition of existing

faculty (Hoyt, et al 2008). The response to this increase in need for faculty under increasing budgetary restraints has been for universities to hire more part-time faculty or to consider more full-time non-tenured faculty (Peterson, 2007).

The trend in higher education thus appears to be an increase in non-tenured earning, part-time, and adjunct faculty positions. Over the past 30 years the number of tenured faculty has decreased. In 1975, full-time tenured professors accounted for 36.5% of all college and university faculty. By 2003, this percentage had fallen to 24.1%. The percentage of faculty in full-time non-tenured and part-time faculty positions has also increased during this time period. Full-time non-tenured and part-time faculty has increased from 43.2% to 68.1% from 1975 to 2005 (Hoeller, 2007; West & Curtis, 2007).

In addition to changes in types of university appointments, there are also changes in the demographics of faculty in colleges and universities. Women now account for 43% of all faculty, up from 27% in 1972 (Barbezat & Hughes, 2009; West & Curtis, 2007). Over half of all doctorate students in the United States are women (Aanerud, et al, 2007; Schoening, 2009), yet women account for only 34% of faculty at doctoral institutions. Women are more likely to be found at four-year colleges and community colleges and thus do not receive the salaries of faculty at more prestigious research universities (Sax, Hagedorn, Arredondo, & Dicrisi, 2002). An increasing equity gap is noted in salary, rank, and tenured positions (Armenti, 2004; Bellas, Ritchey & Parmer, 2001; Hamilton, 2004; Stark, 2001; Viefers, Christie & Ferdos, 2006; Waaldijk, 2006). Female faculty are more likely to leave an institution than male faculty (August & Waltman, 2002).

Research has indicated that more faculty are considering leaving the academy for the private sector, particularly the fields of science, technology, and business (Johnsrud & Rosser, 2002; Manger & Eikeland, 1990). The reasons for leaving higher education vary. One reason is the aging of faculty and retirement (Adams, 2006). Other reasons include opportunity in the private sector, morale, and job satisfaction (Olsen, Maple, & Stage, 1995; Sheehan & Lacey, 1997). Jo (2008) found that women tend to leave their academic positions for non-economic reasons, such as work and family conflicts, and supervisor relationships.

The changing landscape of higher education is likely to influence an educator's satisfaction with his or her job. Research (Brewer & McMahan-Landers, 2003; Johnsrud & Rosser, 2002) has indicated job satisfaction to be one of the key components of faculty intent to leave an institution. Therefore, many researchers have begun to look at the relationship between job satisfaction, gender, and faculty at institutions of higher education (Bilimoria, et al, 2006; Daly & Dee, 2006; Terpstra & Honoree, 2004).

Rank and tenure have been found to be closely linked to job satisfaction (Brewer & McMahan-Landry, 2003; Hagedorn, 2001). Women are more represented in the lower academic and non-tenured ranks and have been found to be less satisfied with their faculty position than men (Seifert & Umbach, 2008). In a study of rehabilitation counselor educators (RCE), Ebener (2004) found 38.8% of RCE faculty members are female, which represents a 10% increase in female RCE faculty since 1987. However, only 20% of women faculty have obtained the rank of full professor while 38.5% are assistant professors and 24% are associate professors.

Ebener (2004) also noted that more part-time/non-tenured faculty are female, 8.8% compared with 3.2% for male educators.

Statement of the Problem

Rehabilitation counselor educators are experiencing similar occurrences in faculty demographics as seen in other disciplines. Ebener (2004) conducted a demographic survey of rehabilitation educators and noted several trends. First, the majority of rehabilitation counselor educators are male, while the majority of rehabilitation counselors and doctoral students are female (Leahy, Chan, & Saunders, 2003; Maki, Berven, & Peterson, 2003). This gender disparity between faculty and students is also common in other fields such as psychology and counseling (Bailyn, 2003; Kval & Meyers, 2003). Another trend is the increase of women faculty in rehabilitation counselor programs. Ebener reports a 10% increase in female faculty since 1987 and postulates that this increase may be partially related to the increase of female faculty in non-tenure or part-time positions. A third trend is that a lower proportion of female faculty achieves the rank of full professor. When compared to male faculty, fewer women hold the rank of full professor (19.3% of female educators versus 45% of male educators).

A few authors have discussed the challenges and barriers faced by women in rehabilitation education. De La Garza (2001) views the roles of women in general as hindering success in rehabilitation counseling programs. She suggests that the traditional female role of "wife" or caregiver manifests itself in the academic setting, resulting in the female faculty spending more time in activities that are not valued in the promotion process. She asserts that female faculty spend more time building relationships with students and engaging in

mundane gender-stereotypical activities such as straightening the drawers of the faculty lunchroom.

Other authors (Bailyn, 2003; Fouad & Carter, 1992; Gardener et al., 2007; Glenn, 2001; Rigers, Stokes, Raja, & Sullivan, 1997; Wasburn, 2007) have discussed the lack of female mentors as being a barrier to success. Within rehabilitation counseling programs, the majority of faculty, including those achieving the rank of full professor, are male (Ebener, 2004). Consequently, the number of female senior faculty to mentor junior faculty is very limited. Glenn asserts that the inaccessibility of female mentors reinforces the male culture within academic settings. Researchers have cited mentoring as playing an important role in the success of women in academia (Bailyn, 2003; Fouad & Carter, 1992; Glenn, 2001). Rigers, Stokes, Raja, and Sullivan (1997) found that the number of female faculty in a department is related to their perceptions of support or hostility in the environment. Mentoring has been linked to job satisfaction and lack of mentoring to job dissatisfaction (Ambrose, Huston, & Norton, 2005). Some authors assert that women may be more likely than their male counterparts to leave a faculty position before earning tenure because of the lack of female mentors (Gardener et al., 2007; Wasburn 2007).

Lacking in the literature of rehabilitation counselor educators is whether faculty are satisfied with their jobs. With an increase of women in doctoral program (Maki et al, 2003) it is possible that more women will enter rehabilitation counselor education in the future. In particular, research is needed to see if female faculty are as satisfied with their positions as male faculty. Also needed is what differences in aspects of the job may exist between female and male faculty. Satisfaction or

dissatisfaction with aspects of the job may help predict why faculty consider leaving their positions.

Significance of the Study

Women in academics have seen an increase in their numbers in academia. Over the past twenty years, there has been an 81% increase in full-time female faculty at public institutions and 61% in private institutions (National Education Association (NEA), 2008). However, this increase may be misleading. Even though women now outnumber men at community and bachelor level colleges, men outnumber women by two to one at doctoral level universities (Curtis, 2005). Salaries at doctoral universities are larger than associate and bachelor institutions and thus, women still average a 20.7% wage gap (Barbezat & Hughes, 2005). University of Miami President Donna Shalala stated, "There has been improvement, but it's simply not enough" (Branch-Brioso, 2009)

Women faculty are less satisfied with certain aspects of their jobs than men (Hagedorn, 2001; Okpara, Squillace, & Erundu, 2005). Job factor satisfaction and dissatisfaction differences between men and women have been examined by numerous researchers (Bilimoria, et al, 2006; Cano & Miller, 1992; Iiacqua, Schumacher, & Li, 1995; Oshagbemi, 1997). Variables explored include salaries, culture of the university or school, policies, rank, and the job itself. In general, these studies have found that inequity still exists in salary between men and women faculty and fewer women are full professors as compared to men. Both female and male faculty are generally satisfied with the work itself but women tend to be more dissatisfied with external factors, or dissatisfiers of the job, such as institutional policies and salaries.

In rehabilitation counselor education, demographic variables of rehabilitation educators, as a whole, have been explored. Ebener (2004) has found progress being made between male and female faculty. The number of female and male faculty at the assistant professor level was equal. However, Ebener found significant differences in the higher ranks associated with tenure. Armstrong, Hawley, Lewis, Blankenship, & Pugsley (2008) looked at job satisfaction of rehabilitation counselors across job titles and settings. Of the respondents, 136 were rehabilitation counselor educators working in higher education. Though the majority of faculty were satisfied with their jobs, almost a third were considering leaving their positions.

Udechukwa (2009) suggests that job satisfaction studies are more valid if one discipline or people in similar jobs are examined individually rather than across job titles. An increasing number of women are earning doctorates in rehabilitation counseling (Maki et al, 2003) and potentially entering academics. Consequently, there is the potential for more parity of female and male rehabilitation counselor educators in the next few years due to the retirement of some faculty. Yet women who are not satisfied with their jobs as faculty in higher education may leave, creating a shortage of qualified faculty in the future. Therefore, the study of gender differences in rehabilitation counselor educators' job satisfaction is timely and relevant.

Theoretical Base

The concept of job satisfaction is complex and multifaceted. One theory of job satisfaction that looks at multiple factors of a job is Herzberg's Two-Factor or Motivation/Hygiene Theory of the Motivation to Work (Herzberg,

Mausner, & Snyderman, 1959). The authors contended that job satisfaction and job dissatisfaction are actually on two separate continuums. They described the job factors that lead to job satisfaction as motivators and the factors of the job that lead to dissatisfaction as hygiene factors.

Job satisfiers or motivating factors are also referred to as the intrinsic factors of the job (Maidani, 1991). These include achievement, recognition, responsibility, advancement, and the work itself. Dissatisfiers, or hygiene factors, are also referred to as extrinsic factors. Hygiene factors are environmental aspects of the job and include policy and administration, supervision, relationship with supervisor and peers, salary, and working conditions (Herzberg, et al, 1959; King, 1970).

Several researchers have used Herzberg's theory of job satisfaction to look at whether faculty in higher education are satisfied or dissatisfied with their jobs (Cano & Miller, 1992; Hagedorn, 2001; Iiacqua, Schumacher, & Li, 1995). Hagedorn found good support for Herzberg's theory in her study of gender differences in faculty satisfaction. Rehabilitation counseling studies have also used Herzberg's theory when exploring job satisfaction among rehabilitation counselors (Andrew, Faubion, & Palmer, 2008; Garske, 1999; Szymanski & Parker, 1995; Wright & Terrian, 1987). All found that the use of Herzberg's theory was appropriate for studying job satisfaction and factors of the job with rehabilitation counselors. Herzberg's theory for rehabilitation counselor educators is a valuable tool for the exploration of gender differences in satisfiers and dissatisfiers of the job.

Purpose of the Study

The purpose of the study is to determine gender and academic rank differences among rehabilitation counselor educators on job satisfaction. Rank is included as a variable because researchers have found it to be a significant characteristic influencing faculty job satisfaction (Bowen & Radhakrishna, 1991; Hagedorn, 2001; Zhou & Volkwein, 2004). Women are often found in the lower ranks in academia, resulting in lower salaries (West & Curtis, 2007).

The focus of the study is to investigate the impact of gender, rank, intrinsic factors, and extrinsic factors of the job on job satisfaction. This study also explores differences among rehabilitation counselor education faculty on job satisfaction controlling for academic rank. The study is directed by asking the following research questions:

1. Are there rank and gender differences on intrinsic job factors?
2. Are there rank and gender differences on extrinsic job factors?
3. Do female and male rehabilitation counselor educators differ on job satisfaction when controlling for academic rank?
4. Do gender, rank, intrinsic factors of the job, and extrinsic factors of the job impact job satisfaction?
5. Do female and male rehabilitation counselor educators differ on job dissatisfaction when controlling for academic rank?
6. Do gender, rank, intrinsic factors of the job, and extrinsic factors of the job impact job dissatisfaction?

All rehabilitation counselor educators had the opportunity to participate in the study. The sample included full-time rehabilitation counselor educator faculty members from colleges or universities that offer bachelors, masters, or doctoral degree in rehabilitation counseling. Exclusion criteria for the study included all respondents who were not rehabilitation counselor educators. Part time faculty were also excluded in this study.

Operational Definition of Variables

The independent variables in the main research question are gender, rank intrinsic factors of the job, and extrinsic factors of the job. The dependent variables are job satisfaction and job dissatisfaction. Job satisfaction and dissatisfaction are identified by two questions on the survey instrument. The Likert scaled question asks to rate one's job satisfaction and dissatisfaction, with 1 being not satisfied and 6 being very satisfied. Differences in satisfaction and dissatisfaction between female and male faculty and rank were explored.

Academic rank is closely tied to tenure. The independent variables of academic rank in this study are assistant professor, associate professor, and full professor. Full professor is the highest rank obtained in academics and has the lowest proportion of female faculty accounted for across disciplines and in rehabilitation counselor educators (West & Curtis, 2007; Ebener, 2004).

Intrinsic or motivator factors are the independent variables in this study. They include achievement, growth, recognition, responsibility, and the work itself. They are defined as follows for the purpose of the study:

1. **Achievement:** This means the actual achievement of work related goals, accomplishments, and results from one's work. It can also be related to the faculty's student's success.

2. Growth: Growth involves professional growth, such as promotion, opportunity for increased responsibility, and the chance to participate in professional activities are all factors of growth.
3. Recognition: This area includes recognition from peers, co-workers, and supervisors. It also will look at the recognition one receives compared to others.
4. Responsibility: This intrinsic factor may include the amount of responsibility one has, autonomy to do the job, and responsibilities such as committee work.
5. Work itself: This factor includes the actual work tasks, such as teaching, and the enthusiasm for the work. The work itself has been found to be a high motivator factor for job satisfaction (Smerek & Peterson, 2007).

Extrinsic, or hygiene factors, are related to the environment, both physically and culturally. They include interpersonal relationships, policy and administration, salary, supervision, and working conditions. They are defined as the following in this study:

1. Interpersonal relationships: This factor examines how one relates to his or her colleagues and supervisor. It investigates a faculty respondent's relationship with co-workers and students, as well as professional relationships and personal relationships on the job.
2. Policy and administration: This factor is part of the environment of the institution which can affect job satisfaction. This area is designed to determine if faculty feel informed about policies, are involved in the decision making process, and how faculty are selected for promotion.
3. Salary: This factor has several components. They include satisfaction with salary as compared to others in one's field, salary ranges at the institution, the individual's

current salary, salary as compared to other faculty in other fields, and faculty salary compared to administration salary.

4. Supervision: In Wood's (1973) survey of faculty, the instrument used to measure the variables, all factors related to competency of the supervisor and supervision are found in this area.
5. Working conditions: These are conditions related to the environmental aspects of the job. Rather than focusing on the physical conditions of the job, working conditions for faculty will focus on hours worked, work schedules, office facilities, and an individual's work schedule compared to other faculty.

The following chapter will review the literature on job satisfaction, job satisfaction among faculty in higher education, female faculty and job satisfaction. Although little has been written on rehabilitation counselor educators and job satisfaction, the prevailing literature will be explored. The next chapter will describe the methodology used in the study, including instruments used, participants, and the procedure for conducting the research. Analysis and results of the data will be presented and discussion of the results.

CHAPTER TWO

REVIEW OF THE LITERATURE

Job satisfaction has been one of the most widely studied concepts in business and industrial psychology. It has been studied in a variety of contexts, including manufacturing industries, government, public and private entities, and education. This review of the literature provides an overview of the studies which have addressed job satisfaction. In particular, the review will provide a summation of the studies which have addressed gender as a variable related to job satisfaction among university faculty.

A historical perspective of the theories of job satisfaction will be covered. The theoretical foundation of the review will be explored in detail. The theory, Herzberg's Two-Factor Theory of Motivation to Work, or the Motivator/Hygiene Theory (Herzberg, Mausner, & Snyderman, 1959), is the basis for numerous studies on job satisfaction. Following this, studies will be reviewed regarding job satisfaction and job satisfaction among faculty in higher education. A particular emphasis will be on female faculty and job satisfaction. The exploration of studies on rehabilitation counselors and rehabilitation counselor educators will lead to a summary of the literature and the need for further studies on job satisfaction and female faculty in colleges and universities with a particular emphasis on rehabilitation counselor educators.

Historical Perspective

The study of worker job satisfaction began in the United States in the 1930s with the Hawthorne Electric Company studies. These studies were originally designed to look at work groups

and conditions which affected work behaviors (Carey, 1967). The series of studies concluded that social satisfaction at the job was more important in determining work behaviors than other conditions of the job, such as pay or physical conditions. These studies gave credibility to studies for work and job satisfaction for decades (Sundstrom, McIntyre, Halfhill, & Richards, 2000).

Out of the work behavior and job satisfaction studies came various theories of worker motivation and job satisfaction. Locke (1976) concluded that there were at least 3,350 articles written on job satisfaction by 1972. Over the course of the many studies on job satisfaction, two diverse views of job satisfaction have emerged. The first view approaches job satisfaction based on the characteristics of the job and the needs of the workers. These needs are often associated with Maslow's Hierarchy of Needs (Maslow, 1943). The second view looks at the individual worker and his or her values, disposition, and what he or she expects from the job. If a job meets expectations or is congruent with a worker's values, there is satisfaction with the job. If there is incongruence with a worker's values or expectations, the result is job dissatisfaction (Short, 2006).

Needs and Satisfaction

Theorists subscribing to the needs basis for job satisfaction attempt to match attitudes of the worker with characteristics of the job. If characteristics of the job meet a person's needs, they are generally satisfied with the job. If the job does not meet their needs, they experience job dissatisfaction (Salancik & Pfeffer, 1977). The needs satisfaction theory has been influenced by Maslow's theory of

human motivation, or hierarchy of needs (Kalleberg, 1977). The most basic needs are physiological, such as food. The next basic need is safety, followed by love and belonging. The higher order needs are esteem and self-actualization.

Researchers interested in worker job satisfaction have long argued that needs and motivation to work are important to job satisfaction (Alderfer, 1969; Hackman & Oldham, 1976). Herzberg (1987) has linked Maslow's basic needs to external factors of the job, such as the physical working conditions and salary. He further states that the higher order needs of esteem and self-actualization are related to internal factors of the job, such as autonomy and recognition. He refers to these needs as psychological growth. Those factors associated with higher order needs are primarily related to job satisfaction and those associated with external factors of the job are related to job dissatisfaction.

Hackman and Oldham (1976) developed a theory of increasing motivation through the design of the work. They identified five characteristics of jobs which improve motivation and job satisfaction. These five characteristics are skill variety, task identity, task significance, autonomy, and feedback (Oldham, Hackman, & Pearce, 1976). They also contend that personal growth needs moderate the motivating potential of a job and a person's attitude towards it. The research conducted on this theory of work motivation resulted in moderate correlations between high growth needs and jobs with high motivating potential. The overall conclusion of their study was that workers with high growth needs, enriched work characteristics, and satisfaction with the internal environment of the work place tend to perform at higher levels than those without these conditions.

A criticism of the job characteristics theory of job satisfaction is there is no standard of which specific job aspects should be considered in job satisfaction measures (Van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003). A meta-analysis of the relationship between job characteristics and job satisfaction (Loher, Noe, Moeller, & Fitzgerald, 1985) found moderate correlations across studies. However, they concluded that much of the variance in the studies are due to other factors.

Values and Disposition

Researchers began to realize that the cognitions of the individual could influence his or her attitudes about work and the job (Vroom, 1964; Lawler, 1971). Vroom (1964) developed his theory of work motivation, called the instrumentality theory, on the interaction of the individual's expectations of an outcome from the job and the valence, or anticipated satisfaction, of that outcome (Quarstein, McAfee, & Glassman, 1992). He defined motivation as the force that compels someone to perform. We expect a certain result from our efforts. He further describes first and second level outcomes. A first level outcome is the direct result of a behavior while a second level outcome is what someone receives. A second level outcome could be salary, recognition, or other types of rewards for performance.

Vroom's theory has expanded into the expectancy theory of work motivation. Lawler (1971), Porter and Lawler (1968) added the concept of a person's abilities as part of the model of expectations and outcomes in work behavior and job satisfaction. Lawler and Suttle (1973) attempted to measure the preference of expected outcomes with a questionnaire given to 69 department managers in six different retail stores. They also gave each of

the participants an ability score. The results in support of their theory were mixed.

The major difference between Vroom (1964) and Porter and Lawler's (1968) theories is that Vroom looked at the anticipation of a reward, while Lawler and Porter looked at the rewards actually received with effort or performance. Vroom contended that the anticipation of rewards brought job satisfaction, while Porter and Lawler postulated it was the actual receiving of the reward that brought job satisfaction (Mitchell, 1974).

The value oriented theorists each tried to attach the individual's perception to work motivation and consequent job satisfaction. Locke (1969) argued that studies conducted before his time were lacking a key concept: values. What a person perceives as valuable can result in job satisfaction or dissatisfaction. He described job satisfaction as a "pleasurable state of emotions" one feels when they are working towards or have achieved their goals based on their values. Dissatisfaction is described as an "unpleasant emotional state" also attributed to one's values or "disvalues." He saw values as two-faceted, with one characteristic being content and the other intensity. Thus, a value is both what a person wants and how much they want it. A person may perceive greater job satisfaction when they achieve something they value, such as recognition, more intently than something they do not value as highly.

Since the 1980s, researchers have begun to look at individual disposition as a predictor of job satisfaction (Judge & Larsen, 2001). Some studies have found that job satisfaction, like personality traits, tends to be stable over time, even when

the person changes jobs (Staw & Ross, 1985; Steel & Rentsch, 1997).

One of the more perplexing problems in researching disposition is determining what traits to study and how to correlate them to job satisfaction. A widely accepted categorization of personality traits is the Big Five or Five-Factor model (Judge & Larsen, 2001). The Big Five is a description of traits which people do or do not have in varying degrees. They include extraversion, neuroticism, agreeableness, conscientiousness, and openness (Norman, 1963). However, Judge and Larsen assert that the most common trait associated with job satisfaction is neuroticism. They have developed a model to look at negative affect and positive affect modulated by high activation and low activation. High and low activation is associated with arousal levels. Judge and Larsen stress that people individualize responses to stimuli in the work place based on their dispositions (negative or positive), arousal levels, and emotional responses to the stimulation. The authors conclude that this model is a new direction and should be researched further.

Theoretical Framework

The theoretical framework for this research is based on Herzberg's Two Factor Theory of Motivation to Work (Herzberg, Mausner, & Snyderman, 1959). It has been used extensively in studies of job satisfaction and higher education faculty (Bowen & Radhakrishna, 1991; Hagedorn, 2000; Hill, 1986; Lacy & Sheehan, 1997). Herzberg maintains that the higher order needs of psychological growth are related to intrinsic factors of the job (Herzberg, 1987). It can be assumed that a faculty position

in a university would address those higher order needs of people such as recognition and achievement.

The use of Herzberg's theory compliments the findings of many studies on gender differences and job satisfaction. While most faculty of both genders are typically satisfied with their jobs, gender differences exist among the characteristics of the job (Hagedorn 2000; Olsen, Maple, & Stage, 1995).

The intrinsic factors of achievement, growth, recognition, responsibility, and the work itself are transferrable to the roles of faculty. These factors have been seen to relate to job satisfaction among faculty. (Knight & Leimer, 2010; Ssesanga & Garrett, 2005). The extrinsic factors of interpersonal relationships, policy and administration, salary, supervision and working conditions have been shown to correlate with gender differences in job satisfaction (Reybold, 2005). Gender differences have been seen among faculty in both job satisfaction and job dissatisfaction (Hagedorn, 1996; Moses, 1986; Snarr & Krochalk, 1996). The following will explore Herzberg's Two Factor Theory. Critique of the theory will also be examined.

Two-Factor Theory of Job Satisfaction

Prior to Herzberg's seminal study in 1959, job satisfaction and motivation to work had been widely studied (Arensberg & McGregor, 1942; Brayfield & Crockett, 1955; Hoppock, 1935). Early researchers focused on individual attitudes towards work or effects of attitudes towards work (Ronan, 1970). However, Herzberg and his colleagues decided to look at a combination of factors related to work, attitudes about work and the effects of these attitudes toward work (Herzberg, et al, 1959).

The initial pilot study was designed to identify factors in job attitudes. The researchers chose to use a qualitative design to reduce response bias and the preconceived ideas of the psychologists. They wanted the workers to identify the factors that affected morale on the job. They were influenced by Abraham Maslow's hierarchy of needs (1946) and Kurt Lewin's (1950) focus on the individual worker as a human being with needs and motives more complex than monetary needs (Herzberg, et al, 1959; Herzberg, 1987). They utilized a semi-structured interview and a qualitative approach to develop their theory. In particular, they asked participants to state critical incidents at their jobs when they had good feelings and when they had bad feelings (Maddox, 1981). The sample participants were accountants and engineers in both large and small companies in the Midwest. The major hypotheses of the pilot study were (Herzberg, et al, p. 16)

1. Factors leading to positive attitudes and those leading to negative attitudes would differ.
2. The factors and effects involved in long-range sequences of events would differ from those in short-range sequences.

After a second pilot study, the research focused on three components to be gained from the interviews. These components included first-level factors, which were described as those sequences of events related to the individual's attitudes; second-level factors, which were the reasons individuals gave for their feelings; and third-level factors, or effects, which were questions designed to probe for attitudinal effects beyond a work related behavior, such as productivity.

The pilot studies allowed the researchers to develop their interview techniques for the main study. They did not have the hypothesis direct the questions asked because the study was

designed to be exploratory. From the pilot studies, however, they were already developing a theory of critical factors involved in job satisfaction.

After interviewing 228 accountants and engineers, they extracted factors which indicated a favorable job attitude. They utilized posteriori content analysis to extract categories from the interview material. The result was a 95% agreement between two coders of material and an additional verification by a third person (Herzberg, et al, 1959).

Herzberg's study revealed that there were distinct differences between job satisfiers, or those factors that individuals identified as good about their work, and job dissatisfiers (Brenner, Carmack, & Weinstein, 1971). Herzberg, et al (1959), concluded that job satisfaction and dissatisfaction were not part of the same continuum but rather two distinct continua. To have no job dissatisfaction does not mean one is satisfied with his or her job. In contrast, to be satisfied with one's job does not mean one is not dissatisfied with his or her job. The opposite of satisfaction is no satisfaction and the opposite of dissatisfaction is no dissatisfaction (Lacy & Sheehan, 1997). Those factors identified as satisfier factors led to increased job satisfaction but those factors identified as dissatisfiers rarely led to job satisfaction. Job satisfiers deal with factors involved in doing the job, where as dissatisfiers describe the context of the job (Herzberg, et al, 1959).

Herzberg and colleagues referred to the job satisfiers as motivators. They reflected feelings about the work itself and professional growth. The dissatisfiers were referred to as hygiene factors because they were related to the conditions that surrounded the job, such as environmental factors, working

conditions, and company policies. These motivator factors are also referred to as intrinsic factors, and the hygiene factors are alternately called external factors (Herzberg, et al, 1959; Herzberg, 1965; Maidani, 1991). The motivator or intrinsic factors include achievement, recognition, responsibility, advancement or growth, and the work itself (House & Wigdor, 1967; Oshagbemi, 1997). The hygiene or extrinsic factors include policy and administration, supervision, relationship with one's supervisor and peers, salary, and working conditions (Herzberg, et al, 1959; King, 1970).

Criticism of two-factor theory

Since the inception of the two-factor theory of motivation to work, there have been many criticisms of the theory and alternative theories of motivation to work. House and Wigdor (1964) were critical of the methodology used to produce the results of the original study. They state that the use of the semi-structured interview is methodology bound. Vroom (1966) adds that individuals tend to rate things as good if they are performing well and blame the environment or others if they are performing badly.

Ewen (1964) also criticizes the methodology. He notes that Herzberg, et al (1959), only used one measurement of attitude, the semi-structured interview. According to Ewen, there were no reliability or validity measures. There was also no measure of overall job satisfaction in Herzberg's study (Ewen, 1964; House & Wigdor, 1967).

More recent authors (Knight & Westbrook, 1999; Udechukwa, 2009) have stated that different measures of job satisfaction have resulted in different outcomes in research studies. They also concluded that not controlling for demographic variables

resulted in differing outcomes. While Ewen (1964), House & Wigdor (1967) criticized the original Herzberg study for narrowing the participants to only accountants and engineers, which were all men, Udechukwa (2009) suggests that selective, non-random clustering of like individuals in similar jobs yields more congruency of results related to satisfiers and dissatisfiers.

Wanous (1974) found in his study of the relationship between job satisfaction and job performance that performing well in an interesting or stimulating job is more rewarding than working in a boring job. Thus, job satisfaction would be higher in occupations that were interesting.

Criticism of the two-factor theory has included the factors determined to be motivators and the factors determined to be dissatisfiers. Researchers have found that some of the satisfiers outlined by Herzberg could be dissatisfiers and some dissatisfiers could be satisfiers (Bokemeier & Lacy, 1987; Brenner, Carmack, & Weinstein, 1971; Iiacqua, Schumacher, & Li, 1995; Lacy & Sheehan, 1997). Connolly & Visweovaran (2000) in their meta-analysis of affectivity and job satisfaction found that 10-20% of the variance in studies could be attributed to affectivity. Brenner, et al, (1971) determined that general human nature may have led to a bias in Herzberg's results.

Summation of Theory

Researchers have argued that the two-factor theory may be flawed due to methodology, does not address other variables, such as affectivity or neutral factors which may affect job satisfaction, and that there is no decisive way to measure job satisfaction (Maddox, 1981; Wanous & Lawler, 1972; House & Wigdor, 1967). However, it is common to have researchers refer

to intrinsic and extrinsic factors in relationship to job satisfaction studies (Clark, 1997; Olsen, Maple & Stage, 1995; Mottaz, 1985).

Herzberg's theory has been tested empirically and qualitatively (Brenner, Carmack, & Weinstein, 1971; Iacua, Schumacher, & Li, 1995; Maidani, 1991; Udechukwa, 2009). Many of the criticisms of the original study used empirical methods rather than the critical incident qualitative approach used in Herzberg's original study (Maidani, 1991). Maidani utilized a questionnaire looking at intrinsic and extrinsic factors of job satisfaction with 486 private and government workers in Florida. His results supported the two-factor theory as those satisfied with their jobs significantly valued motivator factors more than those dissatisfied with their jobs. Oshagbemi (1997) found in his research no support for satisfaction and dissatisfaction being two separate concepts. His study of higher education faculty in the United Kingdom found that teaching and research, both facets of the work itself and a motivator, led to both satisfaction and dissatisfaction.

Herzberg's theory continues to be a part of or the basis for numerous studies involving faculty in higher education (August & Waltman, 2002; Hagedorn, 2000; Oshagbemi, 1997; Snerek & Peterson, 2007). Hagedorn (2000), in her research on concepts of satisfaction with faculty, verifies support for the use of the two-factor theory in studying job satisfaction with higher education faculty.

Job Satisfaction

Job satisfaction is an important concept in all areas of industry and work places. Job satisfaction has been found to correlate with voluntary employee turnover (Judge, 1993;

Udechukwa, 2009). There has been much research on the relationship between job satisfaction and job performance (Judge, Thoresen, Bono, & Paton, 2001; Moorman, 1993; Vroom, 1964) with indecisive results. However, what motivates people to research job satisfaction across disciplines and work settings is the idea that job satisfaction is an important variable in the complex study of work behaviors (Arensberg & McGregor, 1942; Janssen, 2001; Scott & Taylor, 1985).

Judge (1993) looked at the relationship between absenteeism and job satisfaction and how an individual's affective disposition moderates the results. Many researchers have studied the variable of affect and its impact on job satisfaction (Locke, 1970; Locke, 1976; Judge & Hulin, 1990; Weitz, 1952) with various results. Judge (1993) found a correlation between a person's predisposition to life and job satisfaction, but admitted there may be confounding variables not accounted for in the analysis. However, he concludes that people more satisfied with life are more likely to leave a job they are dissatisfied with than people with a negative life view.

A meta-analysis by Dormann & Zapf (2001) concluded that dispositions indirectly influence job satisfaction. Heller, Judge and Watson (2002) found that environmental factors may also influence job satisfaction as well as affective traits.

Researchers have studied age and relationship to job satisfaction, women and job satisfaction, and contextual variables, such as stress and job security (Brush, Moch & Pooyan, 1987; Clark, 1997; Heaney, Israel & House, 1994). Clark, 1997, found that his study supported the findings of earlier research that women tend to be more satisfied with their

jobs than men but these differences disappear when younger, more educated, and professional workers are compared.

Herzberg, et al (1959) developed a theory of motivators for work and dissatisfiers for work by studying the facets of work which led to job satisfaction or dissatisfaction. This concept of work and job satisfaction continues to be studied today (Knight & Westbrook, 1997; Snerek & Peterson, 2007; Udechukwa, 2009). In particular, the Herzberg theory of motivation to work has been used to study job satisfaction in higher education (Bowen & Radhakrishna, 1991; Hagedorn, 2000; Olsen, Maple & Stage, 1995).

Job Satisfaction and Higher Education

Faculty voluntary turnover in higher education is a great concern for universities and colleges. A faculty member leaving a job can affect the reputation of an institution, the interests of the students and staff, and it can be costly to replace faculty (Brewer & McMahan-Landers, 2003; Zhou & Volkwein, 2004). One of the variables associated with voluntary turnover of faculty is job satisfaction (Johnsrud & Rosser, 2002). There is also concern that more faculty will be needed in the future. One estimate is that there will be a need for 32% more faculty by 2014 (Umbach, 2007). More researchers are beginning to look at which factors of job satisfaction are important to faculty at colleges and universities.

Faculty members of colleges and universities have unique facets of their job which separate them from other worksites. Autonomy of work is an important factor for job satisfaction for faculty (Tack & Patitu, 1992). New or junior faculty are often on a tenure earning track in order to keep their position (Olsen, 1993). Olsen describes this junior faculty status as

very stressful, often leading to job dissatisfaction in the first few years of appointment. Full professors often report the highest level of job satisfaction, while assistant professors experience the lowest satisfaction.

The ranking of assistant, associate, and full professor is most often tied to tenure, with assistant professors in pre-tenure tracks and associate and full professors' tenured (Nieman & Dovidio, 1998). Bedeian, Ferris, & Kacmar (1992) found that in the general public, tenure, or length and rank in a job, is a consistent and stable predictor of job satisfaction. Hill (2009), in an empirical study of counselor educators and job satisfaction, found that the only effect size of the multivariate analysis of variance (MANOVA) was tenure status. She found that stress and coping strategies were only related to tenure. In support of this, some studies have found that lower-ranked professors were less satisfied than higher-ranked professors (Johnsrud & Rosser, 2002; Russell, 1962).

Satisfiers and Dissatisfiers

Utilizing Herzberg's motivator/hygiene separation of satisfiers and dissatisfiers in job satisfaction, the literature was reviewed to see what motivates faculty or causes dissatisfaction. Researchers have looked at a variety of both intrinsic and extrinsic characteristics of the job to determine features of the job which cause satisfaction or dissatisfaction. Some of the more common satisfiers for job satisfaction among faculty were intellectual stimulation, teaching, relationships with colleagues, mentoring, rank, growth and professional development, and autonomy (Bretz & Judge, 1994; Daly & Dee, 2006; Diener, 1985; Hoyt, et al, 2008; Johnsrud & Rosser, 2002; Olsen, 1993).

The most common dissatisfiers were salaries, perceived injustices, policies and procedures, and the promotion process (Brewer & McMahan-Landers, 2003; Diener, 1985; Hagedorn, 2000). The causes of dissatisfaction tended to relate to external factors, such as administrative policies and the climate of the institution. Salary was often cited as a cause for dissatisfaction among assistant professors but not full professors (Zhou & Volkwein, 2004). Job security was also a factor in dissatisfaction with the job, with tenured professors more satisfied with the increased job security tenure brings.

Relationships and access to resources can impact attitudes on job satisfaction. Bilimoria, et al (2000) examined how access to institutional resources in order to conduct research led to increased feelings of job satisfaction and success among faculty. Those faculty with less access to resources, especially women, tended to have more dissatisfaction with the job. They found gender differences between male and female faculty in the areas of internal support and job satisfaction and relationships and job satisfaction. Men tended to have higher job satisfaction, with increased access to academic supports, such as funding for research. Women tended to have increased job satisfaction with a work environment of colleagues who respected their work.

Intent to Leave

Dissatisfied faculty are more likely to leave their institution. This can result in increased costs to replace faculty and more time spent searching for qualified people (Brewer & McMahan-Landers, 2003). The literature suggests that a large percentage of faculty consider leaving their institutions.

Approximately 41% of faculty surveyed in a study by

Sanderson, Phua and Herda (2000) considered leaving higher education for other careers. Johnsrud and Rosser (2002) state that faculty are rarely satisfied with their own institution. Murray and Cunningham (2004) found a similar percentage of community college faculty considering leaving their institution.

International researchers have also studied job satisfaction and university faculty. In a study of faculty across eight nations, Lacy and Sheehan (1997) found that factors relating to the university atmosphere, a sense of community, and relationships with colleagues were the greatest predictors of job satisfaction. Manger and Eikeland (1990) conducted a study of reasons to leave a university among Norwegian faculty. Relationships with colleagues were the most significant factor for faculty to leave their position. They also stated that that faculty who found their work intrinsically satisfying were more likely to stay at their institutions.

Two-factor Theory and Higher Education

Support for educational research on faculty job satisfaction and utilization of the two-factor theory have been found from several sources. Hill (1986) surveyed faculty from twenty colleges and universities in Pennsylvania. His study of over 1,000 participants led to the conclusion that the two-factor theory is very appropriate for use with higher education faculty. In particular, the assessment of job content and job context does have an effect on satisfaction and dissatisfaction of faculty. The author found significant evidence that faculty members derive the most satisfaction from the intrinsic or motivator factors of the job. The two key factors for job satisfaction were teaching and the job itself. Iacua, Schumacher, and Li (1995) also supported the two-factor theory of satisfaction and dissatisfaction and found faculty were most

satisfied with the intrinsic variables associated with the job itself, such as teaching and support for research.

Brewer and McMahan-Landers (2003), in their study of faculty work satisfaction, found that extrinsic factors, such as rules and procedures, were related to faculty dissatisfaction. To further support the use of Herzberg's theory, they found that the work itself, an intrinsic motivator, was the source of satisfaction for most faculty surveyed.

Other researchers have found Herzberg's theory to be applicable to research on faculty job satisfaction (Hagedorn, 2000; Hagedorn, 2001; Olsen, 1993). Though they may be looking at different variables, such as type of university, gender and demographic differences, or tenure and rank, these researchers have confirmed that the use of Herzberg's two-factor theory is helpful in identifying factors related to job satisfaction. Even though Herzberg's theory does have its detractors, (Nias, 1981; Oshagbemi, 1997), it is still useful to identify factors leading to job satisfaction and dissatisfaction with college and university faculty.

Women Faculty and Job Satisfaction

Women now account for over 50% of Ph.D.'s earned in the United States (Aanerud, et al, 2007; West & Curtis, 2006). However, women currently hold 39% of full time faculty positions compared to 61% for men. Women are clustered more in non-tenure earning positions, are in lower ranks than men, and generally receive lower salaries (Bradley, 2000; Brewer & McMahan-Landers, 2003; Park, 2000). More disconcerting is the statistic that women leave their academic positions at a higher rate than men (Brush, Moch, & Pooyan, 1987; Jo, 2008; Johnsrud & Rosser, 2002). With faculty shortages predicted and more women deciding

to leave academics, the study of job satisfaction, in particular for female faculty, is timely (Sax, Hagedorn, Arredondo, & Dicrisi, 2002; Tack & Patitu, 1992).

Demographic variables have been analyzed to see if differences exist between groups in regard to job satisfaction. One variable often analyzed in relationship to faculty job satisfaction is gender. Women have been found to be less satisfied in their faculty jobs than men (Brewer & McMahan-Landers, 2003; Hagedorn, 2000; Seifert & Umbach, 2008). The Collaborative on Academic Careers in Higher Education (COACHE, 2008) did a survey of 134 four year college and university pre-tenured faculty. Some of their significant findings regarding gender differences revealed that women were less satisfied with the nature of the work than men. Women also stated there was less clarity regarding tenure policy and the process of obtaining tenure and were less satisfied with the "sense of fit" in their department.

Factors

The literature suggests a number of factors resulting in differences between female and male faculty satisfaction and dissatisfaction. As with job satisfaction in the general workforce, there are contradictions and similarities in findings. For example, even though there are salary disparities between male and female faculty, some studies have found that salary is not related to job satisfaction (Hagedorn, 2001; Robertson & Bean, 1998). Other researchers found that faculty members with higher salaries were more satisfied and less likely to leave their institutions (August & Waltman, 2004; Zhou & Volkwein, 2004).

Hagedorn (2000) states that gender is the most researched demographic yet there is mixed evidence regarding specific interactions, gender, and job satisfaction. In her study of two national databases of higher education faculty, she found that overall job satisfaction was nearly the same for men and women. However, she did note differences in satisfaction when rank and salary were included in the analysis. The study revealed that men were then more satisfied than women. She also found that stereotyping and discrimination had an influence on satisfaction for women. Female medical school faculty also refer to gender-based discrimination as a source of job dissatisfaction (Carr, et al, 2000).

Interpersonal relationships were also considered a significant factor for job satisfaction among female faculty (August & Waltman, 2004; Bender, Donohue, & Heywood, 2005; Manger & Eikeland, 1990). Ambrose, Huston, and Norman (2005) in a qualitative study of faculty at a small, private research university, found that women faculty felt "disenfranchised." Mentoring from senior faculty was the number one source of satisfaction.

Bilimoria, et al (2006), also concluded that job satisfaction is influenced by the climate of the institution and mentoring opportunities. However, the differences between men and women were mediated by access to internal resources and relationship support. Men felt more supported than women and had better access to resources.

Tenure status is a frequently explored variable in research looking at gender differences in faculty job satisfaction. Women are underrepresented in tenured positions, particularly at doctoral and research institutions (Schoening, 2009). Only 25%

of female faculty at doctoral institutions are tenured (West & Curtis, 2006). In fields where people with Ph.D.'s tend to work in academics, like the natural sciences, engineering, and mathematics, men have a better chance of achieving tenure than women (Aanerud, et al, 2007).

Tenure has been linked to job satisfaction (Hill, 2009; Nieman & Dovidio, 1998) with tenured faculty being more satisfied with their jobs than non-tenured faculty. Tenure and rank are correlated, with assistant professors not tenured and associate and full faculty tenured. Because women are often in lower ranks or in non-tenured positions, tenure as a factor of achievement or recognition is often found in gender differences studies (Olsen, Maple, & Stage, 1995; Bowen & Radhakrishna, 1991). A promotion in rank may trigger a change in sources of job satisfaction for both men and women (Hagedorn, 2001).

Gender Differences

The research regarding gender differences in job satisfaction among faculty of colleges and universities has yielded mixed results. Most of the literature reviewed agrees that women and men are both generally satisfied with the work itself (Cano & Miller, 1992; Hagedorn, 2000; Iiaqua, Schumacher, & Li, 1995; Nias, 1981; Robertson & Bean, 1998). Most faculty are satisfied with their intellectual lives and autonomy, the courses they teach, and research (Johnsrud & Rosser, 2002).

However, the factors leading to satisfaction and dissatisfaction differ. Rank and tenure are often cited (Hill, 2009; Nieman & Dovidio, 1998; Olsen, 1993; Olsen, Maple, & Stage, 1995). Others have focused on the conditions, policies, and procedures of the institution (Ambrose, Huston, & Norman, 2005; Snarr & Krochalk, 1996).

Some researchers have looked at the type of institution faculty are teaching in as a predictor of job satisfaction. Reybold (2005) contends that expectations of academic life and the realities of one's institution shape perceptions of job satisfaction. He found that the majority of participants in the study were dissatisfied at non-research versus research institutions. Bretz and Judge (1994) found that the person-organization fit has a direct impact on job satisfaction in the general workforce.

Women are grouped more at four-year colleges than research institutions (Bradburn, Sikora, & Zimbler, 2002; Toutkoushian & Conley, 2005; West & Curtis, 2007). They are also more often in non-tenured positions and are at lower rank. Williams (2004) laments the dearth of mothers in desirable faculty jobs. Only 45% of tenured female faculty are mothers, raising the question of equitable treatment of working mothers versus working fathers.

Job Satisfaction and Rehabilitation Counselor Educators

The focus of this study is job satisfaction of female faculty in rehabilitation counselor education. Seifert and Umbach (2008) suggest that faculty in one field approximate each other more than faculty in other fields, regardless of being at different institutions. Udechukiva (2009) also suggests that researching participants that are in similar positions may result in fewer discrepancies in job satisfaction studies. Therefore, the study of one faculty discipline has been selected.

In reviewing the literature of rehabilitation counselor educators, there have been no studies found which look specifically at job satisfaction among faculty. There have been

studies which have addressed job satisfaction among rehabilitation counselors (Andrew, Faubion, & Palmer, 2002; Armstrong, Hawley, Lewis, Blankenship, & Pugsley, 2008; Capella & Andrew, 2004; Garske, 1999; Szymanski & Parker, 1995; Wright & Terrian, 1987). One study, Armstrong, et al (2008), addressed faculty of rehabilitation counselor educators in the larger context of employment centers.

Armstrong, et al (2008) looked at job satisfaction among rehabilitation counselors in various job settings. Included in the study of 1,802 respondents were 136 rehabilitation counselor educators working at colleges and universities. The majority of educators rated their job satisfaction as high. Though 89.5% of the educators had high job satisfaction, 27.4% indicated they had intentions to quit their position. This was the second highest intention- to-quit response in the study. This relatively high intention-to-quit response may be attributed to retirement. Of the educator respondents, 33.1% were over the age of 55. Educators also rated high satisfaction with their coworkers and supervisors. They were least satisfied with promotional opportunities and pay. In the study, the educators were rated highest, with satisfaction of pay at 60.8%.

Wright and Terrian (1987) looked exclusively at rehabilitation counselor practitioners. They followed the Herzberg Two-Factor theory as the basis of their study. The results showed that there was more satisfaction with intrinsic factors of the job, as in the work itself, than extrinsic factors, which included satisfaction with administration, working conditions, and supervision.

Szymanski & Parker (1995) also used Herzberg's theory to examine job satisfaction among vocational rehabilitation agency

counselors. They found that counselors who stayed at the job for extrinsic reasons, such as pay, were less productive. Counselors who stayed at their job due to intrinsic factors were more satisfied and less likely to leave. Both studies provide support for Herzberg's theory of motivation when used with rehabilitation counselors.

Other studies looking at rehabilitation counselors and job satisfaction also supported the use of Herzberg's motivation/hygiene theory. Garske (1999) found that the highest number of positive response items were for the work itself while the highest number of dislikes were hygiene factors. Capella and Andrews (2004) researched counselor job satisfaction and consumer satisfaction in vocational rehabilitation. They also looked at gender differences in job satisfaction. Utilizing intrinsic and extrinsic factors they found the highest level of satisfaction with the intrinsic factors of their work. When consumers were satisfied with their counselors, this increased the counselors' job satisfaction. They did not find any gender differences in overall job satisfaction among counselors but did see gender differences in dissatisfiers. Female counselors were less satisfied with the extrinsic factors of their job, such as the work environment and safety during travel.

In an earlier study of job satisfaction among vocational counselors, Miller and Muthard (1965) found one difference between genders in job satisfaction. The difference was greater satisfaction with pay and job security with increased caseloads for women counselors.

Importance

The number of women in doctorate programs has increased in rehabilitation counseling. Maki, Berven and Peterson (2003), in a survey of educational programs, found that 66% of the students were female. They also noted a change to fewer full-time faculty and more part-time faculty, though the number of programs surveyed did not decrease from their previous study (Maki & Berven, 1994).

Ebener (2004) found that while the number of female faculty has increased since 1987 by 10%, 38.5% were ranked as assistant professors. Only 20% of female faculty were full time professors. Ebener also found an increase in part time and non-tenure earning faculty, a trend seen in all areas of education (West & Curtis, 2007). Females were more often stuck in these positions compared to men.

As suggested by Armstrong, et al (2008) 33.1% of rehabilitation counselor educators are over the age of 55. Ebener (2004) argues that more women should be entering academics to fill positions being vacated. However, if rehabilitation counselor educators follow national trends of female Ph.D.'s, many may not be entering academics or will be leaving voluntarily for jobs outside of academics (August and Waltman, 2004). Therefore, the importance of job satisfaction for retention of current and new faculty, in particular job satisfaction of women faculty, is important to the continued success of rehabilitation counselor education programs.

Conclusion

This overview of the literature on job satisfaction, faculty in higher education, and gender differences among

faculty has looked at the use of Herzberg's motivation/hygiene theory as an appropriate theory to ground research on gender differences in job satisfaction. Since 1959, when Herzberg, et al (1959) published their study on motivators and hygiene factors of job satisfaction, there have been numerous studies supporting and criticizing their contention that job satisfaction and dissatisfaction are two separate constructs (Ewen, 1964; House & Wigdor, 1967; Mottaz, 1985; Smerek & Peterson, 2007). Researchers in higher education and job satisfaction have also used Herzberg as a method for determining job satisfaction among faculty and gender differences in job satisfaction (Bowen & Radhakrishna, 1991; Hagedorn, 2000; Cano & Miller, 1992).

Though Herzberg, et al (1959) published their research over fifty years ago, the current use of determining factors of job satisfaction and dissatisfaction is still valid (Udechukwa, 2009). The study of faculty satisfiers and dissatisfiers in regard to the job is relevant in a field where faculty shortages are expected and faculty voluntary attrition has been a factor for over a decade, especially among female faculty (Daly & Dee, 2006; Manger & Eikeland, 1990; Tack & Patitu, 1992).

Hagedorn (2000) believes that studies of faculty job satisfaction should include academic discipline and institutional type. Rank is also a key variable in her research. Other researchers have suggested studying one discipline to help control confounding factors of dissimilar people in dissimilar jobs (Carr, Freidman, Moskowitz & Kazis, 1993; Seifert & Umbach, 2008; Udechukwa, 2009). Therefore, the study of rehabilitation counselors, a single cross sectional study across colleges and universities, is timely and appropriate for

research to determine what factors of satisfaction and dissatisfaction may be important for job satisfaction.

CHAPTER THREE

METHODOLOGY

This study examined job satisfaction among female and male rehabilitation counselor educators and its relationship to both gender and rank. This chapter presents the hypotheses followed by the research design, population, instruments to be used, and the procedure. The statistical methods of analysis will be described for the various hypotheses.

Research Design

A survey research design method was chosen for this study. Survey research design is used quite frequently in many areas, including education, psychology, and sociology, and business (Zhang, 1999). The research questions examine the relationship between gender, rank, intrinsic factors of work, extrinsic factors of work, and job satisfaction of rehabilitation counselor educators. Specifically, the following questions were addressed:

1. Are there rank and gender differences on intrinsic job factors?
2. Are there rank and gender differences on extrinsic job factors?
3. Do female and male rehabilitation counselor educators differ on job satisfaction when controlling for academic rank?
4. Do gender, rank, intrinsic factors of the job, and extrinsic factors of the job impact job satisfaction?
5. Do female and male rehabilitation counselor educators differ on job dissatisfaction when controlling for academic rank?

6. Do gender, rank, intrinsic factors of the job, and extrinsic factors of the job impact job dissatisfaction?

Hypotheses

The following null hypotheses were tested:

1. There are no gender and rank differences on intrinsic job factors.
2. There are no gender and rank differences on extrinsic factors of the job.
3. Female and male rehabilitation counselor educators do not differ on job satisfaction when controlling for academic rank.
4. Gender, rank, intrinsic factors of the job, and extrinsic factors of the job do not impact job satisfaction.
5. Female and male rehabilitation counselor educators do not differ on job dissatisfaction when controlling for academic rank.
6. Gender, rank, intrinsic factors of the job, and extrinsic factors of the job do not impact job dissatisfaction.

Variables

In the first null hypothesis, the independent, or predictor variables, gender and rank were analyzed in relation to the dependent, or criterion variable, intrinsic factors of the job. The dependent variable is associated with Herzberg's theory of job satisfaction (Herzberg, Mausner & Snyderman, 1957). These variables include satisfiers, or intrinsic motivators, which are factors that lead to positive feelings about work. They include achievement, growth, recognition, responsibility, and the work itself (House and Wigdon, 1967; Oshagbemi, 1997). The five factors were combined together for one mean score of all intrinsic factors.

The second null hypothesis examines the independent variables of gender and rank on the dependent variable extrinsic factors of the job. These factors are related to dissatisfiers of the job and are related to the workers' relationship with the environment. They include interpersonal relationships, policy and administration, supervision, salary, and working conditions (King, 1970). Again, all extrinsic factors were combined to result in one mean score for the analysis.

The third null hypothesis the independent variable, gender, was analyzed in relation to the dependent variable, job satisfaction, controlling for academic rank. Job satisfaction is a single item question on the survey.

Gender, rank, intrinsic factors of the job, and extrinsic factors of the job are all independent variables in the analysis for the fourth null hypothesis. Job satisfaction is the dependent variable in the analysis.

In the analysis of the fifth null hypothesis, gender was the independent variable and job dissatisfaction the dependent variable, controlling for academic rank. Job dissatisfaction is a single item question on the survey. The sixth null hypothesis variables are the same as null hypothesis four, except the dependent variable is job dissatisfaction.

Participants

The total population of rehabilitation counselor educators is relatively small compared to all rehabilitation counselors. In the years 1999-2000, 392 full-time faculty members worked in institutions with Council on Rehabilitation Education (CORE) accredited master degree programs (Maki, Berven, & Peterson, 2003). The ideal sample for this study would be a census,

however identifying and contacting the full population of rehab counselor educators who fit the criteria for the study was not possible. There is no comprehensive listing of all faculty teaching in this area, and Maki, et al (2003) suggest that making a comprehensive list of rehabilitation counselor faculty may be challenging, because some may be part of a broader program, such as counseling psychology. There are also rehabilitation counselor faculty teaching at the bachelor degree and doctoral degree level.

The participants in this study are full time faculty in bachelor, master, or doctoral degree programs in rehabilitation services or rehabilitation counselor education programs. The participants are in tenure or tenure-earning positions at the rank of assistant, associate, or full professor.

For this study, potential participants were identified by first identifying programs in rehabilitation education and then seeking email contact information for faculty members in those programs. The institution membership list of the National Council on Rehabilitation Education (NCRE), *The Directory of Doctoral Study in Rehabilitation* (Maki & Berven, 1992) and from a list of CORE accredited institutions offering master degree programs, both on campus and online, and GradSchools.com (2010) were used to identify programs. CORE (2010) also provides a list of institutions which offer a bachelor degree in rehabilitation. All institution listings were cross-checked for overlap.

An alternate method would have been to request participation via the list serve from the NCRE. However, this list includes more than 1200 contacts who are not only full-time faculty, but also staff, adjunct professors, and instructors. Based on previous studies by Maki, et al and Ebener (2004) the assumption was that using all the names on the list serve would

result in a large overage of participants who did not meet the inclusion criteria for the study.

Utilizing CORE for institutions offering resulted in an incomplete listing of potential programs. Not all educational programs are CORE accredited. Similarly, using *The Directory of Doctoral Study in Rehabilitation* was not accurate for the number of doctoral programs in the country. The latest publication, 1992, resulted in omissions of more recently developed programs and listings of discontinued programs. GradSchools.com had similar omission and listings of discontinued program. Therefore, the final list of potential participants that was emailed may be an over or under average of the total population. In total, 402 surveys were e-mailed.

Response Rate

An a priori analysis was conducted using G*Power version 3.0.10 (Faul & Erdfelder, 2007) to determine the appropriate sample size, or number of respondents, for this study. The test used was the F test and the statistical test is the multiple regression with R^2 deviation from zero. The input parameters were an effect size at 0.15 or medium effect size, the α error probability at 0.05, and the power ($1-\beta$ error probability) at 0.95. The number of predictors was 4. The output parameters include a critical F at 2.444766, the numerator $df = 4$, the denominator $df = 124$ with a total sample size of 129. The power is at 0.95. (Faul, Erdfelder, Buchner & Lang, 2009). The sample size of 129 exceeds the required size needed for a MANOVA analysis and a multiple regression.

Description of the Sample

The sample included female and male rehabilitation counselor educators in the United States. The survey was sent to 402 potential participants. As stated earlier, the total number of potential participants in this study may not be reflective of the actual number of rehabilitation counselor educators. There were 178 responses, a 44% response rate. Of these responses, only 144 were complete (36% response rate of completed surveys). An additional six (4%) respondents were in instructor or adjunct positions and thus not used in the analysis. After excluding incomplete surveys and surveys completed by respondents who were part-time or not at the rank of assistant professor or above, 137 participants were included, representing 32% of the people to whom the survey was mailed. Initially, 52 emails were returned as undeliverable. The emails were then checked against the faculty listings on institutional websites and resent. A total of 15 emails were still undeliverable. These could not be verified for resubmission. A second email was sent to the identified faculty after approximately three weeks after the first sending. The 15 emails that were returned as undeliverable were again returned.

A third mailing was sent in response to some rehabilitation counselor educators requesting approval by NCRE. The second survey emailing resulted in 152 responses and the third emailing resulted in 178 responses. Table 1 illustrates the attrition of respondents into participants in the final analysis.

Table 1

Respondents and Actual Participants

Number Sent	Responses	Complete	Excluded	Included	Total %
402	178	144	7	137	32%

The final study sample consisted of 72 (52.6%) male faculty and 65 (47.4%) female faculty. The distribution across academic rank was almost equally divided with 45 (32.8%) assistant professors, 47 (34.3%) associate professors and 45 (32.8%) full professors. The majority of the participants self-identified as white (75.2%) followed by black (16.1%), Asian (2.9%), Native American (2.9%), other (2.1%) and Non-white Hispanic (.7%).

Instruments

A modification of the *Wood's Faculty Satisfaction/Dissatisfaction Scale* (Wood, 1976) was given to all rehabilitation counselor educators (Appendix A). The modified survey has a Likert scale with six responses ranging from 1 (very dissatisfied) to 6 (very satisfied). The questionnaire was originally designed to measure job satisfaction among North Carolina Community College System (NCCCS) instructors. The author suggests that the instrument be modified to "suit local needs" (Wood, 1976). The questionnaire has been modified to measure intrinsic and extrinsic factors relevant to rehabilitation counselor faculty at a college or university setting.

The original survey had 79 items, including demographic questions. This was revised by Wood in 1976 to 72 questions. There were four demographic questions looking at gender, age, highest academic degree obtained, and current instructional

responsibility. The newly revised survey for this study has 17 demographic items. These include questions related to gender, tenure status, race, certifications or licensure held, rank, full or part time, college or school program is located, institution type, and intent to leave. Four questions referred to mentoring. There were ten optional, open-ended questions after each of the sections related to the intrinsic and extrinsic factors. This resulted in a 90 question on-line survey.

The original survey was designed for community college faculty. Modifications were made to the other questions of the original survey to reflect faculty working at the college or university level. The last sixty-three questions are grouped to represent Herzberg's motivational-hygiene theory as originally designed by Woods. The areas addressed in the original and revised survey include ten dimensions of Herzberg's theory to measure major categories of job satisfaction/dissatisfaction. These categories are achievement, growth, interpersonal relations, organizational policy and administration, recognition, responsibility, salary, supervision, working conditions, and the work itself (Appendix B).

The last two questions of the survey refer to an overall level of job satisfaction/dissatisfaction. The questions ask for the respondent's overall satisfaction and dissatisfaction with the job. They are rated on a six point Likert scale with 1 being very dissatisfied and 6 being very satisfied. The literature suggests that a single-item measure of overall job satisfaction is a valid measure (Castillo & Cano, 2004; Wanous, Reichers, & Hudy, 1996).

Reliability and validity

The original survey was analyzed using factor analysis. Using a factor loading of .50 from the rotated pattern matrix,

the questions could be loaded onto the ten dimensions. The author used a panel of experts to determine the content validity of the items.

Internal consistency of the items was measured. The reliability coefficients for internal consistency were as follows: achievement, 0.8122; growth, 0.862; interpersonal relations, 0.930; policy and administration, 0.949; recognition, 0.851; responsibility, 0.882; salary, 0.919; supervision, 0.964; the work itself, 0.874; working condition, 0.874; and all subscales together, 0.977.

A test-retest was given three weeks apart to the same 52 instructors. Using a Spearman-Brown prophecy formula, the following test-retest reliability coefficients were: achievement, 0.908; growth, 0.849; interpersonal relations, 0.923; policy and administration, 0.954; recognition, 0.937; responsibility, 0.895; salary, 0.926; supervision, 0.948; the work itself, 0.896; working conditions, 0.948; and all subscales together, 0.992.

Variables

The instrument measured the hygiene or extrinsic factors associated with Herzberg's theory. Five of the ten dimensions related to Herzberg's theory are the intrinsic, or motivating, factors of work. These factors include achievement, growth, recognition, responsibility, and the work itself. Each of the five dimensions has questions representative of the factor. For example, an item representative of the dimension achievement is "personal goal attainment". The five dimensions associated with extrinsic factors include interpersonal relationships, policy and administration, salary, supervision, and working conditions. Again, there are representative questions for each dimension.

Procedure

The research proposal was submitted to the Institutional Review Board (IRB) of the Florida State University. Approval was obtained in July, 2010 (HSC No. 2011.5829). The IRB was later amended, requesting permission to send out the mailing a third time. This amendment was approved on January 28, 2011 (Appendix C). The first part of the survey is the informed consent (Appendix D). Participants' affirmative response to the informed consent indicates their consent to participate. The next part of the survey is the modified *Wood's Faculty Satisfaction/Dissatisfaction Scale* (Wood, 1976). The 90 question survey, which includes demographic information of the individual participants, is taken one at a time. All questions from the Wood Survey are forced responses. The survey was estimated to take approximately 45 minutes to complete. In actuality, the average time for completion took 12 minutes as indicated by the survey management report. The survey system options were set to anonymous access allowed and the survey could only be taken once. The system does not allow a participant to take the survey more than once by tracking internet addresses.

The institutions and rehabilitation counselor faculty were identified by the NCRE list serve, CORE accredited programs, and the *Dictionary of Doctoral Study in Rehabilitation* (Maki & Berven, 1992). The GradSchool.com listing was utilized to capture those programs not included in the other resources. The names of faculty retrieved from these resources were cross checked by searching individual institutional websites.

All faculty in programs that could be verified by searching the institutional websites that offered the bachelor, master, and/or doctoral degree in rehabilitation counseling or services were sent an email with the hyperlink to the Florida State University College of Education Survey Management System

website. This was sent the end of the first month of the spring semester. It was anticipated that most professors would have had time to begin the semester before receiving the survey. This would allow for the request to participate in a survey to not interfere with the hectic beginnings of new teaching and research schedules. The identified faculty of rehabilitation counselor education were sent an initial email requesting their participation in the survey. The email also contained a letter describing the study, how confidentiality will be maintained, and inviting their participation (Appendix E). Participation in the survey indicated acceptance to be in the study. The research proposal and IRB approval from the Florida State University was sent to the NCRE and approval was obtained (Appendix F).

The data was collected through the Florida State University College of Education Survey Management System website. All categorical data was coded to a numerical score. Categorical and numerical data collected were entered into the Statistical Package for the Social Sciences (SPSS), version 18. The participants were randomly assigned an identification number for data entry and analysis to ensure confidentiality.

Data Analysis

Frequency distributions were conducted for the 137 participants for gender, rank, race, highest rehabilitation counselor degree, certification or license, tenure status, institution Carnegie ranking, and years in present rank. Frequency distributions and correlations between intrinsic, extrinsic, job satisfaction, and job satisfaction were completed.

The first two questions of the research were analyzed using a multivariate analysis of variance (MANOVA). A MANOVA is used to analyze more than one dependent variable at a time. The independent variables were gender and academic rank. Intrinsic

and extrinsic factors of the job were the dependent variables. The assumption of homogeneity was performed using Box's test.

The third question was answered using a linear regression. The independent variable was gender and the control variables were academic rank, including assistant professor, associate professor, and full professor. The dependent variable was job satisfaction. Tolerance and variance inflation factors were indicated to assess for multicollinearity.

The fourth research question was analyzed using a multiple linear regression of job satisfaction on gender, academic rank, intrinsic and extrinsic factors of work. The multiple regression controlled for intrinsic and extrinsic factors of the job. A multiple regression is used in analysis to learn more about the linear relationship between a number of independent variables and a dependent variable. The assumptions of multiple regression analysis were conducted. Tolerance and variance inflation factors were used to examine potential multicollinearity.

The last two research questions concentrated on gender, rank, and job dissatisfaction. However, the wording of the dissatisfaction question led to confusion among some of the participants. The question literally asked if one were very satisfied with their job dissatisfaction. Some of the comments included "this is very confusing" to "is this the same question again" to "how am I supposed to answer this". It was concluded that the validity of this question was raised and therefore, an analysis of job dissatisfaction using the single item dissatisfaction question would result in invalid results after the analysis. These two questions were therefore not part of the analysis of data.

The next chapter describes the results of the analysis for the four research questions.

CHAPTER FOUR

RESULTS

The purpose of the study was to determine gender and academic rank differences among rehabilitation counselor educators on job satisfaction. Six research questions were posed in Chapter 1:

1. Are there rank and gender differences on intrinsic job factors?
2. Are there rank and gender differences on extrinsic job factors?
3. Do female and male rehabilitation counselor educators differ on job satisfaction when controlling for academic rank?
4. Do gender, rank, intrinsic factors of the job, and extrinsic factors of the job impact job satisfaction?
5. Do female and male rehabilitation counselor educators differ on job dissatisfaction when controlling for academic rank?
6. Do gender, rank, intrinsic factors of the job, and extrinsic factors of the job impact job dissatisfaction?

The current chapter presents the results from the analyses performed to answer these research questions. Initially, the results from preliminary and descriptive statistical analyses are presented, followed by the results from the inferential analyses performed to answer the research questions, and the chapter ends with a summary.

Descriptive Results

Descriptive statistical results were presented for the sample demographic characteristics for the entire sample in

Chapter 3. However, of the 178 individuals who participated in this study, the results in the current chapter are based on the 137 participants who provided complete data, were ranked at the assistant professor level or above, and reported working full time. Descriptive statistics on these 137 participants are shown in Table 2.

The two demographic independent variables in this study were gender and rank. Table 2 shows that the majority of the participants (52.6%) were male and the participants were evenly distributed across the three academic ranks, with 32.8% assistant professors, 34.3% associate professors, and 32.8% full professors.

Table 2 also shows descriptive statistics for several other demographic and background variables. The most common race was White (75.2%), with 16.1% Black, 2.9% Asian, 2.9% Native American, .7% non-White Hispanic, and 2.2% reporting some other race. Nearly all of the participants (94.2%) held Doctorate of Philosophy degrees, 49.6% were Certified Rehabilitation Counselors, and 48.1% were Certified Rehabilitation Counselors with an additional certification. The majority of the participants were tenured (59.9%). The most common Carnegie ranking for the schools at which the participants were employed were Research University I (27.7%), Research University II (21.2%), Master's Comprehensive University and College I (19.0%), and Master's Comprehensive University and College II (10.2%). The average number of years in the current rank was 7.23 years ($SD = 6.95$ years).

Table 2

Descriptive Statistics for Participant Demographic and Background Characteristics (N = 137)

Variable	Frequency	Percentage
Gender		
Female	65	47.4
Male	72	52.6
Rank		
Assistant Professor	45	32.8
Associate Professor	47	34.3
Full Professor	45	32.8
Race		
White	103	75.2
Black	22	16.1
Non-White Hispanic	1	.7
Asian	4	2.9
Native American	4	2.9
Other	3	2.2
Highest Rehabilitation Counseling Degree		
Doctor of Philosophy	129	94.2
Specialist in Education	7	5.1
Missing	1	.7
Certification		
CRC	134	97.8
CRC + Other	66	48.1
Other	3	2.2
Tenure Status		
Yes	82	59.9
No	55	40.1

Table 2-Continued

Carnegie Ranking at Your Institution		
Baccalaureate (liberal Arts College) I	1	.7
Baccalaureate (liberal Arts College) II	1	.7
Doctoral University I	10	7.3
Doctoral University II	12	8.8
Master's Comprehensive University and College I	26	19.0
Master's Comprehensive University and College II	14	10.2
Research University I	38	27.7
Research University II	29	21.2
	<i>M</i>	<i>SD</i>
Years in Present Rank	7.3	6.95

Table 3 shows descriptive statistics for the measures of intrinsic motivation, extrinsic motivation, job satisfaction, and job dissatisfaction. All factors for intrinsic motivation were combined for a mean score and all factors for extrinsic factors were combined for a mean score. Scores on the intrinsic motivation scale ranged from 1.48 to 6.00 with a mean of 4.74 ($SD = .88$), while scores on the extrinsic motivation scale ranged from 1.31 to 5.96 with a mean of 4.22 ($SD = .94$). Job satisfaction scores ranged from 1.00 to 6.00 with a mean of 4.88 ($SD = 1.18$), while job dissatisfaction scores ranged from 1.00 to 6.00 with a mean of 4.34 ($SD = 1.50$).

Table 3

Descriptive Statistics for Intrinsic Motivation, Extrinsic Motivation, Job Satisfaction, and Job Dissatisfaction (N = 137)

Variable	Min.	Max.	<i>M</i>	<i>SD</i>
Intrinsic Motivation	1.48	6.00	4.74	.88
Extrinsic Motivation	1.31	5.96	4.22	.94
Job Satisfaction	1.00	6.00	4.88	1.18
Job Dissatisfaction	1.00	6.00	4.34	1.50

The correlations among these four variables are shown in Table 4. Intrinsic motivation scores and extrinsic motivation scores were positively correlated, $r = .86$, $p < .001$. Job satisfaction scores were positively correlated with both intrinsic motivation, $r = .80$, $p < .001$, and extrinsic motivation, $r = .76$, $p < .001$. Job dissatisfaction scores were also positively correlated with both intrinsic motivation, $r = .73$, $p < .001$, and extrinsic motivation, $r = .68$, $p < .001$.

Table 4
Correlations Among Intrinsic Motivation, Extrinsic Motivation, Job Satisfaction, and Job Dissatisfaction (N = 137)

Variable	1.	2.	3.	4.
1. Intrinsic Motivation	-			
2. Extrinsic Motivation	.86*	-		
3. Job Satisfaction	.80*	.76*	-	
4. Job Dissatisfaction	.73*	.68*	.72*	-

* $p < .001$.

The correlation between job satisfaction and job dissatisfaction was $r = .72$, $p < .001$. It was expected that these two scores could be positively correlated based on Herzberg's theory of job satisfaction and dissatisfaction being on two separate continuums. A problem may have arisen due to the manner in which these two variables were assessed. Some respondents wrote they were confused regarding the question on rating their job dissatisfaction. Specifically, the two items measuring job satisfaction and job dissatisfaction, respectively, were "Consider all aspects of your job as a faculty member and indicate your overall job satisfaction" and "Consider all aspects of your job as a faculty member and indicate your overall job dissatisfaction." The problem is that the participants were asked to respond to these items on a scale

from very dissatisfied to very satisfied. Taken literally, for job dissatisfaction the participants were being asked to rate their level of satisfaction with their dissatisfaction. A better way to assess this variable would have been to ask for a response indicating level of agreement with the statement rather than level of dissatisfaction with the statement. The validity of the question on job dissatisfaction led to a decision to test the hypotheses of job satisfaction only, eliminating the last two research questions relating to job dissatisfaction. Therefore, in the analyses performed to test the hypotheses of this study, only job satisfaction scores were used.

Inferential results

Based on the six research questions of this study, six null hypotheses were tested in this study. The purpose of this section is to present the results from these hypothesis tests.

Null Hypothesis 1 and 2. Two hypotheses were addressed to examine the relationships between the two motivation scores (intrinsic and extrinsic) and the participants' gender and rank. The first of these was: There are no gender and rank differences on intrinsic job factors. The second hypothesis was: There are no gender and rank differences on extrinsic factors of the job. These two hypotheses were examined with a MANOVA in which gender and rank were the independent variables and intrinsic and extrinsic factors of the job were the dependent variables. Box's test of the equality of covariance matrices was not significant, $M = 22.55$, $p = .120$, indicating that the assumption of homogeneity of variances was met.

The effect of gender was not significant, $2(130) = .17$, $p = .847$, indicating that gender had no effect on intrinsic and extrinsic motivation scores. However, faculty rank was statistically significant, $F(4(262)) = 4.11$, $p = .003$. This indicated that the faculty members' rank had an effect on

intrinsic and extrinsic motivation scores. When examined individually, faculty of different ranks differed in terms of both intrinsic motivation scores, $F(2, 131) = 4.51, p = .002$, and extrinsic motivation scores, $F(2, 131) = 3.91, p = .010$. Figure 2 shows the estimated marginal means for intrinsic motivation scores as a function of rank, and it can be seen that intrinsic motivation scores were lowest for assistant professors ($M = 4.45, SE = .13$), slightly higher for associate professors ($M = 4.65, SE = .12$), and highest for full professors ($M = 5.12, SE = .14$). Figure 3 shows the estimated marginal means for extrinsic motivation scores as a function of rank, from which it can be seen that full professors had higher extrinsic motivation scores ($M = 4.58, SE = .15$) than either assistant ($M = 4.04, SE = .14$) or associate professors ($M = 4.02, SE = .13$). The interaction between gender and rank was also not significant, $F(4, 262) = .86, p = .491$, indicating that the higher intrinsic and extrinsic motivation scores for full professors did not depend on gender.

Null Hypothesis 3. The third hypothesis of this study was: Female and male rehabilitation counselor educators do not differ on job satisfaction when controlling for academic rank. This null hypothesis was tested via a linear regression analysis with gender and rank as predictors of job satisfaction scores. In the examination of potential multicollinearity, none of the tolerance values was less than .10, and none of the variance inflation factors was greater than 10, indicating that multicollinearity was not a problem. Homogeneity is assumed based on the Levene's test of equality of error variance with $F = 2.174, p = .061$.

The normality of residuals from the regression analysis are shown in Figure 4 and indicate slight negative skew. Thus, the results from this analysis should be interpreted with caution.

Table 5 shows the results from this regression analysis. The regression model was significant, $F(3, 133) = 4.19, p = .007$, with an R^2 of .09 indicating that 9% of the variance in job satisfaction was explained within this model. Gender was not significant, but the dummy variable for full professorship was significant, $\beta = .32, p = .002$. This indicated that full professors had higher levels of job satisfaction than assistant professors (the reference group). Nevertheless, the third null hypothesis of this study was not rejected, and it was concluded that female and male rehabilitation counselor educators do not differ on job satisfaction when controlling for academic rank.

Table 5

Results from Regression Analysis for Null Hypothesis 3 (N = 137)

Variable	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Constant	.06	.39		.15	.878
Gender (reference category = female)	-.10	.12	-.04	-.77	.443
Rank (reference category = assistant)					
Associate professor	-.14	.15	-.05	-.91	.364
Full professor	.06	.16	.03	.40	.687
Intrinsic motivation	.78	.14	.58	5.75	.000
Extrinsic motivation	.31	.13	.24	2.43	.017

Note. $R^2 = .66$, adjusted $R^2 = .65$, $F(5, 131) = 51.53, p < .001$.

Null Hypothesis 4. The fourth null hypothesis of this study was: Gender, rank, intrinsic factors of the job, and extrinsic factors of the job do not impact job satisfaction. This null hypothesis was examined with a multiple linear regression analysis with job satisfaction as the dependent variable and

gender, academic rank, intrinsic motivation, and extrinsic motivation as the independent variables.

Prior to presenting the results from this hypothesis test, the assumptions of multiple regression analysis were examined. First, potential multicollinearity among the independent variables were examined by computing tolerance and variance inflation factor. None of the tolerance values was less than .10, and none of the variance inflation factors was greater than 10, indicating that multicollinearity was not a problem in this analysis. Second, the normality of residuals from the regression analysis were examined, and Figure 1 presents a histogram of these values. As can be seen the regression residuals were approximately normally distributed. Homogeneity is assumed based on the Levene's test of equality of error variance with $F = 1.913$, $p = .096$.

The results from the regression analysis are shown in Table 4. Overall, the regression model was statistically significant, $F(5, 131) = 51.53$, $p < .001$. This indicated that the set of independent variables was significantly related to job satisfaction, the dependent variable. The R^2 value of .66 indicated that 66% of the variance in job satisfaction was accounted for by the independent variables in the model. Although gender and rank were not statistically significant, both intrinsic motivation and extrinsic motivation had significant relationships with job satisfaction. Participants with higher levels of intrinsic motivation tended to have higher job satisfaction scores, $\beta = .58$, $p < .001$. Similarly, participants with higher levels of extrinsic motivation tended to have higher job satisfaction levels, $\beta = .24$, $p = .017$. The results also indicate that intrinsic motivation is a better predictor of job satisfaction than extrinsic factors. Based on these findings, the fourth null hypothesis of this study was

rejected based on the statistical significance of intrinsic and extrinsic motivation, although neither gender nor rank were related to job satisfaction levels.

Table 6

Results from Regression Analysis for Null Hypothesis 4 (N = 137)

Variable	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Constant	.06	.39		.15	.878
Gender (reference category = female)	-.10	.12	-.04	-.77	.443
Rank (reference category = assistant)					
Associate professor	-.14	.15	-.05	-.91	.364
Full professor	.06	.16	.03	.40	.687
Intrinsic motivation	.78	.14	.58	5.75	.000
Extrinsic motivation	.31	.13	.24	2.43	.017

Note. $R^2 = .66$, adjusted $R^2 = .65$, $F(5, 131) = 51.53$, $p < .00$

Hypothesis 5 and 6. The fifth null hypothesis of this study was: Female and male rehabilitation counselor educators do not differ on job dissatisfaction when controlling for academic rank. As noted above, this null hypothesis was not tested given the problems associated with the measurement of job dissatisfaction.

The sixth null hypothesis was gender, rank, intrinsic factors of the job, and extrinsic factors of the job do not impact job dissatisfaction. Problems with the measurement of job dissatisfaction precluded the testing of this null hypothesis. Due to the confusion stated by some of the participants regarding the confusion of the dissatisfaction question on the

survey, null hypothesis five and six were not tested and are not part of the study results.

Summary of Findings

This chapter has presented the results of this study related to job satisfaction among rehabilitation counselors and its relationship to gender, academic rank, intrinsic motivation, and extrinsic motivation. The primary findings from this study were:

1. Participants with higher levels of intrinsic motivation tended to have higher job satisfaction scores.
2. Participants with higher levels of extrinsic motivation tended to have higher job satisfaction levels.
3. Intrinsic factors are a better predictor of job satisfaction than extrinsic factors.
4. Gender was not predictive of intrinsic or extrinsic motivation, but full professors tended to have higher intrinsic and extrinsic motivation scores than assistant professors or associate professors.
5. Gender was not predictive of job satisfaction, but full professors tended to have higher levels of job satisfaction than assistant professors.

The next chapter presents a discussion of these findings, their implications, and recommendations for educational practice and future research.

CHAPTER FIVE

DISCUSSION

Job satisfaction has been studied over many decades. This study's intent was to see if gender and rank has an influence on job satisfaction among faculty in higher education. In particular, one discipline was chosen, rehabilitation counselor educators, to determine if gender and rank had an impact on job satisfaction and if intrinsic and extrinsic factors of the job influenced job satisfaction. No other empirical study has been conducted exclusively with rehabilitation counselor educators and job satisfaction.

Researchers have studied job satisfaction in faculty of higher education using multiple independent variables. The most common variable is gender (Hagedorn, 2001; Olsen, Maple, & Stage, 1995; Okpara, Squillace, & Erondy (2005). Academic rank is also a common variable, with the assumption that faculty of higher rank are more satisfied with their jobs (Johnsrud & rosier, 2002; Terpstra & Honoree, 2005).

The use of Herzberg's two-factor theory of motivation to work was used as the theoretical base of the study. The use of the two-factor theory has been used in a few studies of higher education faculty (Bowen, 1980; Cano & Miller, 1992). The use of Herzberg's theory allows the researcher to determine what factors of the job have the most impact on job satisfaction and what differences among faculty may exist. The following chapter discusses the results of this study, limitations of the study, and recommendations for further study for faculty and job satisfaction.

Gender, Rank and Job Satisfaction

Gender and Job Satisfaction

The results of the analysis in this study found that gender did not have an effect on job satisfaction among rehabilitation counselor educators. Both men and women were satisfied with their jobs. An examination of the literature suggests that there are inconsistencies in the research on faculty job satisfaction and gender. Terpstra and Honoree (2004) did not find any significant differences among the variables of gender and influence on job satisfaction. In fact, they found that women were more likely to be satisfied with their work than men. Others have also suggested there are not significant differences between male and female faculty in regard to job satisfaction (Bilimoria, 2000; Cano & Miller, 1992). In contradiction to these results, other researchers have found small or significant gender differences among faculty and job satisfaction (Brewer & McMahan-Landers, 2003; Lacey & Sheehan, 1997; Seifert & Umbach, 2008). In some cases, women in certain areas of education, such as science and technology, had lower job satisfaction than women in the social sciences as compared to men (Bender and Heywood, 2006). As is the contradictory nature of job satisfaction research, Okpara, Squillace, and Erondy (2005) found significant differences between male and female faculty. They found that male faculty were more satisfied with their pay, supervision, and promotion. Female faculty were more satisfied with their relationships with co-workers.

In this study, no differences were found between male and female faculty and job satisfaction. This lends support to the number of researchers in higher education who also found no

differences among male and female faculty and job satisfaction (Hill, 2009; Lacy & Sheehan, 1997).

Academic Rank and Job Satisfaction

Academic rank, another commonly assessed variable in job satisfaction among faculty, also reveals inconsistencies in the literature. In the analysis in this study, academic rank was significant in its impact on job satisfaction. In particular, full professors were more satisfied with their job than associate and assistant professors. Though some researchers have reported no significance regarding academic rank and job satisfaction (Terpstra & Honoree, 2004) others have found significant differences between academic rank and factors of the job (Bozeman & Gaughan, 2011; Johnsrud & Rosser, 2002; Olsen 1993; Volkwein & Zhou, 2003). In particular, full professors were more satisfied with their salaries than lower ranked faculty.

Why full professors may be more satisfied with their jobs than professors of lower rank has not been answered fully in the literature. Oshagbernie (1997) maintains that higher rank typically correlates with higher pay. However, pay alone may not be the factor that accounts for full professors to have higher job satisfaction. He also found that full professors are more concerned with some aspects of the job, such as working conditions. Appropriated quality working facilities may signify the status of the full professor. Full professors have been acknowledged by their peers that they have reached an elite status in their profession. Hagedorn (2000) found that job satisfaction increases with rank and promotion. The results of this study support the results of other studies that full professors were more satisfied with their jobs than assistant or

associate professors. However, in this study, only 9% of the variance could be explained by the model. This indicates that there are other unaccounted for factors which influence job satisfaction.

Though this study does not purport to answer why full professors have a higher rate of job satisfaction than lower academic ranks, several researchers have made suppositions. One is that full professors are recognized by their colleagues as having achieved an elite status in academics (Niemann & Davido, 1998). Others contend that assistant and associate professors are still under stress to produce, particularly in research and publications, to achieve the status of tenure, in the case of assistant professors, and full professorship, in the case of associate professors (Bedeian & Ferris, 1992; Olsen, 1993).

Another explanation may be that full professors have continued in academia because they were more satisfied with the work. Those in lower rank, and in particular, nontenured assistant professors, may be more likely to leave their institution or academics. Zhou and Volkwein (2004) found rank and seniority to have the largest effect on intentions to leave an institution or academics. Riger, et al (1997) concluded that the longer a faculty member remained at an institution, the more supportive they found the cultural climate. Thus, it may be that those professors who were most dissatisfied may have left academics and those most satisfied remained. To answer this question fully is beyond the scope of this study.

Factors of the Job

Herzberg's two-factor theory was chosen for this study as it associates factors of the job with job satisfaction and dissatisfaction. Intrinsic factors of the job include

achievement, growth, recognition, responsibility, and the work itself. Extrinsic factors of the job include interpersonal relationships, policy and administration, salary, supervision, and working conditions. This study examined what differences may exist with gender and academic rank and intrinsic and extrinsic factors of the job.

Gender, Academic Rank and Job Factors

In the literature, many empirical studies have found that male and female faculty differ as to what features of the job influence job satisfaction. In this study there were no differences between men and women faculty and their satisfaction with intrinsic and extrinsic factors of the job. Other researchers have also found no differences between men and women faculty (Bowen & Radhakrishna, 1991; Cano & Miller, 1992; Terpstra & Honoree, 2004). In this study, there may have been unaccounted factors which were not addressed on the questionnaire which would lead to differences between men and women. Hagedorn (2000) refers to the complexities of job satisfaction and attempts to measure it resulting in varying results and conclusions.

Some studies did find significant difference between male and female faculty and job factors. Okpara, Squillace, and Erundu (2005) found that male faculty were more satisfied with their pay, supervision, and promotion. Female faculty were more satisfied with their relationships with co-workers. Salary, supervision, and interpersonal relationships are considered extrinsic factors and are often associated with job dissatisfaction (Mottaz, 1985). Promotion is an intrinsic factor and more often associated with job satisfaction. This study has not found differences between men and women rehabilitation

counselor educators and factors of the job, either intrinsic or extrinsic.

Academic rank did have a significant impact on both intrinsic and extrinsic factors of the job. Full professors had the highest intrinsic and extrinsic motivation scores as compared to associate and assistant professors. Though some researchers have reported no significance regarding academic rank among certain factors (Terpstra & Honoree, 2004) others have found significant differences between academic rank and factors of the job (Bozeman & Gaughan, 2011; Johnsrud & Rosser, 2002; Olsen 1993; Volkwein & Zhou, 2003). Some of these factors included working conditions, an extrinsic factor, and promotion, considered an intrinsic factor. In particular, full professors were more satisfied with their salaries than lower ranked faculty. The results of this study support the results of other studies that full professors had higher extrinsic and intrinsic motivation scores than either assistant or associate professors. Both intrinsic and extrinsic factors have an impact on job satisfaction with intrinsic factors more predictive of job satisfaction than extrinsic factors. This finding lends support to Herzberg's theory that intrinsic factors are more related to job satisfaction.

Conclusion

Several conclusions can be made regarding the results from this stud. First, gender did not impact job satisfaction. Both male and female rehabilitation counselor educators were satisfied with their jobs as faculty. Academic rank, however, did influence job satisfaction. Full professors were more satisfied than associate or assistant professors. Full professors were also more satisfied with both intrinsic and

extrinsic factors of the job. In addition, both intrinsic and extrinsic factors influenced job satisfaction though intrinsic factors were more predictive of job satisfaction. The results of this study further add to the complex and diverse results found in studying job satisfaction and faculty satisfaction.

Limitations of the Study

There were several limitations of the study which may have affected the outcomes. First, this was a study of one discipline of faculty, rehabilitation counselor educators. Any results should not be generalized outside of this discipline.

The use of the regression analysis and MANOVA may be a potential limitation of the study. Regressions can result in type I or type II errors depending on the assumptions that the coefficients are established without error (Fox, 1997). In multiple correlations the coefficients could be overstated in value.

There were some problems with the survey manager. The day after the second email was sent, the system shut down for 48 hours. Though no responses were lost before the system shut down, this may have resulted in some faculty not participating in the survey. Three faculty alerted me that they filled out the survey and could not submit it. Another email was sent to them.

The use of a self report survey can lead to bias in the results. People who have an interest in the topic may be more motivated to respond to the questionnaire, leading to a response bias (Armstrong & Overton, 1977). The researcher may also exhibit bias in the questions chosen for the survey (Gay & Airasian, 2003). One respondent to this survey suggested that the letter to potential faculty could even bias the results. Other factors related to survey could include the questions did

not identify correctly the satisfiers and dissatisfiers of rehabilitation counselor educators who responded.

Further Research Recommendations

The literature and this study demonstrate the complex nature of identifying job satisfaction in general and faculty job satisfaction. A mixed design methods study may better identify what factors of job satisfaction are most important to the participants. The original Herzberg's study was a qualitative study. Over the years, researchers have attempted to conduct quantitative studies by anticipating the variables that are most important to faculty. There are many factors to consider when examining job satisfaction and faculty (Bozeman & Gaughan, 2011).

Hagedorn (2001) stated that rank had an influencing effect on job satisfaction. This study is consistent with her findings. However, more research is needed to determine what differences are accounted for between lower ranked faculty and full professors. In particular, why are associate professors less satisfied than full professors when both are usually in a tenured position. Further studies on faculty who have left academia or plan to leave may give better insight as to why there are rank differences.

Finally, regardless of findings, job satisfaction is important to assist administrators in assessing how to retain valuable faculty. Researchers who have studied faculty and job satisfaction have all implied that there is more information needed to clarify what influences job satisfaction and consequently, job dissatisfaction.

APPENDIX A
MODIFICATIONS TO *WOOD'S FACULTY*
SATISFACTION/DISSATISFACTION SCALE

Modifications to *Wood's Faculty Satisfaction/Dissatisfaction*
Scale (Wood, 1976)

1. Respond to each item by checking the appropriate alternative or entering the requested information.
 2. If you have difficulty responding to any item, give your best estimate or appraisal. You may wish to clarify your response by commenting in the margin or on the back.
 3. It is very important that all items have a response.
-

Institution _____

Last name _____ First name _____

1. Sex: __1. Male __2. Female
2. Marital status: __1. Married __2. Single __3. Separated
 __4. Divorced __5. Widowed
3. Age on last birthday _____
4. Highest level of education
 1. High school
 2. Postsecondary certificate or diploma
 3. Associate degree
 4. Bachelor's degree
 5. Bachelor's degree plus hours
 6. Master's degree
 7. Master's degree plus hours
 8. Education specialist degree
 9. Doctoral degree
 10. Other (please specify) _____
5. Formal preparation for teaching is a part of your academic background. __1. Yes __2. No

6. Major area of current instructional responsibility (check one: ___1. College-transfer ___2. Technical ___3. Vocational)
7. Total years of teaching experience in all institutions ___
8. Years of service at present institution _____
9. Primary nature of work experience prior to present position:
1. ___ Education (public or private at all levels)
 2. ___ Noneducation (business, Civil Services, industry, etc.)

The following are changes made or modified from the original survey:

ACHIEVEMENT

#14 eliminated

Students follow the practices being taught.

GROWTH

#18 eliminated

Opportunities provided for growth in education compared with growth in other fields.

#19 eliminated

Participation in in-service education.

#20 eliminated

Types and levels of in-service education.

#21 modified

Opportunities to grow professionally *through formal education.*

RESPNSIBILITY

#45 eliminated

The number of classes or groups for which you are responsible.

SUPERVISION

#57 modified

On the job supervision given by your superior.

#67 eliminated

Specific on-the-job training offered by your superior.

THE WORK ITSELF

#69 modified

Work and association with college-age students

To: Work and association with students

#69 eliminated

The degree to which you work with an advisory committee to do your job.

#74 modified

The level and enthusiasm about teaching.

To: The level and enthusiasm about your work.

APPENDIX B
MODIFIED WOOD'S FACULTY
SATISFACTION/DISSATISFACTION SCALE

Modified Wood's Faculty Satisfaction/Dissatisfaction Scale

1. Gender
 - a. Female
 - b. Male

2. Race (if multiple which do you identify with more?)
 - a. White
 - b. Black
 - c. Non-white Hispanic
 - d. Asian
 - e. Native American
 - f. Other (indicate) _____

3. Highest degree obtained in rehabilitation counseling
 - a. Bachelor of science
 - b. Master of Science
 - c. Education Specialist
 - d. Doctor of Philosophy
 - e. Other _____

4. What certification(s) or licensure do you hold?
 - a. CRC
 - b. LMHC/LPC
 - c. Licensed Psychologist
 - d. Other (indicate) _____
 - e. None

5. Are you full time or part time?
 - a. Full time
 - b. Part time

i. If part time you do not need to continue the survey.

6. Rank

- a. Full Professor
- b. Associate Professor
- c. Assistant Professor
- d. Instructor
- e. Other (indicate) _____

7. Number of years in present rank?

- a. _____

8. Are you tenured?

- a. Yes
- b. No

9. Carnegie ranking at your institution

<http://sestat.nsf.gov/docs/carnegie.html>

- a. Research University I
- b. Research University II
- c. Doctoral University I
- d. Doctoral University II
- e. Master's Comprehensive University and College I
- f. Master's Comprehensive University and College II
- g. Baccalaureate (liberal arts) College I
- h. Baccalaureate (liberal arts) College II
- i. Associates of Arts
- j. Professional School and Specialized Institution

10. What degrees are offered at your college or university?

- a. Bachelor's degree in rehabilitation counseling
- b. Master's degree in rehabilitation counseling
- c. Doctor of philosophy in rehabilitation counseling
- d. Other (indicate) _____

11. Do you have or have you had a mentor at your institution?

- a. Yes
- b. No

12. Is (or was) your mentee a male or female?

- a. Male
- b. Female
- c. Both
- c. both
- d. N/A

13. Are you or have you been a mentor to someone at your institution?

- c. Yes
- d. No

14. Is (or was) your mentee male or female?

- a. Male

- b. Female
- c. both
- d. N/A

15. What college or school is your program located within the college or university? (E.g., College of Education)

a. _____

16. In how many years do you plan to leave your institution?

a. _____

17. If you plan to leave your institution, for what reason(s)?

- a. Retirement
- b. Faculty position at another institution
- c. Private sector or non-faculty position
- d. Other _____

For each of the following items, select the response which best represents your level of job satisfaction or dissatisfaction.

Scale:

- 1=Very dissatisfied
- 2=moderately dissatisfied
- 3=slightly dissatisfied
- 4=slightly satisfied
- 5=moderately satisfied
- 6=Very satisfied

ACHEIVEMENT

- 18. The actual achievement of work-related goals. 1 2 3 4 5 6

- 19. The immediate results from your work. 1 2 3 4 5 6

- 20. The actual adoption of practices which you recommend. 1 2 3 4 5 6

- 21. Personal goal attainment. 1 2 3 4 5 6

- 22. Observing students' growth and success over a period of time. 1 2 3 4 5 6

- 23. The extent to which you are able objectively to evaluate your accomplishments. 1 2 3 4 5 6

- 24. Any additional comments regarding your accomplishments.

GROWTH

- 25. Opportunities for increased responsibility. 1 2 3 4 5 6

- 26. Opportunities to grow professionally. 1 2 3 4 5 6

- 27. Opportunities to participate in professional conferences, workshops, etc. 1 2 3 4 5 6

- 28. Opportunities for research. 1 2 3 4 5 6

29. Any additional comments regarding your professional development.

INTERPERSONAL RELATIONSHIPS

30. Friendliness of your co-workers. 1 2 3 4 5 6

31. Co-operation from faculty in your department. 1 2 3 4 5 6

32. Co-operation from faculty outside your department.
1 2 3 4 5 6

33. Faculty-student relationships. 1 2 3 4 5 6

34. Professional relationships on the job. 1 2 3 4 5 6

35. Any additional comments regarding your professional relationships?

POLICY AND ADMINISTRATION

36. Overall institutional relations including faculty, students, and staff. 1 2 3 4 5 6

37. Your involvement in making decisions. 1 2 3 4 5 6

38. The extent to which you are informed about matters affecting you. 1 2 3 4 5 6

39. The procedures used to select faculty for promotion. 1 2 3 4 5 6

40. The extent to which administration policies and procedures are made available to the faculty. 1 2 3 4 5 6
41. The administrative procedures used to carry out the educational process. 1 2 3 4 5 6
42. The extent to which administrative policies and procedures are actually followed. 1 2 3 4 5 6
43. The extent to which the policies meet faculty needs. 1 2 3 4 5 6
44. The educational philosophy which prevails in your institution. 1 2 3 4 5 6
45. Any additional comments regarding administration and policies.

RECOGNITION

46. Recognition of your accomplishments by co-workers. 1 2 3 4 5 6
47. Recognition of your accomplishments by superiors. 1 2 3 4 5 6
48. Your recognition compared to that of your co-workers. 1 2 3 4 5 6
49. The recognition you receive from administration for your ideas. 1 2 3 4 5 6
50. Publicity given to work and ideas. 1 2 3 4 5 6

51. Any additional comments regarding recognition of your accomplishments.

RESPONSIBILITY

52. The number of classes for which you are responsible. 1 2 3 4 5 6

53. The authority you have to get the job done. 1 2 3 4 5 6

54. The total amount of responsibility you have. 1 2 3 4 5 6

55. Your responsibilities compared with those of your co-workers. 1 2 3 4 5 6

56. Committee responsibilities. 1 2 3 4 5 6

57. Responsibilities outside your major areas of interest. 1 2 3 4 5 6

58. Any additional comments regarding your responsibilities.

SALARY

59. The method used to determine your salary. 1 2 3 4 5 6

60. The range of salaries paid to faculty at your institution. 1 2 3 4 5 6

61. The top salary available to your faculty compared to faculty in other fields. 1 2 3 4 5 6

62. Your salary compared to that of faculty in other professions. 1 2 3 4 5 6

63.The amount of your salary. 1 2 3 4 5 6

64.The earning capacity of faculty compared to that of
administration. 1 2 3 4 5 6

65.Any additional comments regarding your salary.

SUPERVISION

66. The level of understanding that your superiors and you
have of each other. 1 2 3 4 5 6

67. Supervision given by your supervisor. 1 2 3 4 5 6

68. Competence of your supervisors to give leadership.
1 2 3 4 5 6

69. Personal encouragement given by your supervisor.
1 2 3 4 5 6

70. The willingness of your supervisor to delegate authority.
1 2 3 4 5 6

71.Authority delegated as compared to duties delegated.
1 2 3 4 5 6

72. Counsel and guidance given by your supervisor.1 2 3 4 5 6

73. The initiation of innovations given by your supervisor.

- 1 2 3 4 5 6
74. The fairness of your supervisor. 1 2 3 4 5 6
75. The sensitivity of your supervisor to your needs.
1 2 3 4 5 6
76. The consistency of your supervisor. 1 2 3 4 5 6
77. Any additional comments regarding your supervision.

THE WORK ITSELF

78. Work and association with students. 1 2 3 4 5 6
79. The interesting and challenging aspects of teaching.
1 2 3 4 5 6
80. The general type of work you do. 1 2 3 4 5 6
81. Your level of enthusiasm about your work. 1 2 3 4 5 6
82. Any additional comments regarding your work.

WORKING CONDITIONS

83. The number of hours you work each week. 1 2 3 4 5 6
84. Your work schedule compared to that of similar positions
in other fields. 1 2 3 4 5 6
85. Your office facilities. 1 2 3 4 5 6
86. The adequacy of instructional equipment. 1 2 3 4 5 6

87.The number of course preparations required. 1 2 3 4 5 6

88.Consider all aspects of your job as a faculty member and
indicate your overall job satisfaction. 1 2 3 4 5 6

89. Consider all aspects of your job as a faculty member and
indicate your overall job dissatisfaction. 1 2 3 4 5 6

90.Any additional comments regarding your working conditions
and/or job satisfaction/dissatisfaction.

APPENDIX C

IRB APPROVAL AND REVISION

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673, FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 7/7/2010

To: Debora Oliveira

Dept.: EDUCATIONAL PSYCHOLOGY AND LEARNING SYSTEMS

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research

The impact of gender and rank on job satisfaction among rehabilitation counselor educators utilizing Hertzberg's two-factor theory of motivation

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be **Expedited** per 45 CFR Â§ 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be

used in recruiting research subjects.

If the project has not been completed by **7/5/2011** you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: **Deborah Ebener, Advisor**

HSC No. **2010.4572**

Human Subjects Application - Revision for an Approved Application

PI Name: Debora Sue Oliveira

Project Title: The impact of gender and rank on job satisfaction among rehabilitation counselor educators utilizing Hertzberg's two-factor theory of motivation

HSC Number: 2011.5829

Your application has been reviewed by IRB Chair and will be transmitted to office staff for approval paperwork.

APPENDIX D
INFORMED CONSENT

FSU Behavioral Consent Form

The impact of gender and rank on job satisfaction among rehabilitation counselor educators.

You are invited to participate in a research study regarding the impact of gender and rank on job satisfaction among rehabilitation counselor educators. You were selected as a possible participant because of your position as a faculty member of a rehabilitation counseling education program at a college or university. We ask that you read this form and email Debora Oliveira with any questions you may have before agreeing to participate in the study.

This study is being conducted by Debora Oliveira (under advisement of Dr. Deborah Ebener), a doctoral candidate in the Educational Psychology and Learning Systems Department at The Florida State University.

Background Information

The purpose of the study is to determine if gender and rank impact job satisfaction among rehabilitation counselor educators.

Procedures

If you agree to be in this study, we would ask you to complete the following survey. The survey only needs to be completed once and will take approximately 45 minutes to complete.

Risks and Benefits of being in the Study

There are minimal risks in this study. There is a small risk that, if confidentiality is breached, the sensitive nature of some of the responses could identify you to others. If the questions in the survey cause you distress, you have the right not to answer any of the questions or discontinue participation in the study.

There are no benefits to you being in this study. There may be future benefits from this study in regard to job satisfaction in rehabilitation counselor education.

Compensation

None.

Confidentiality

The records of this study will be kept private and confidential to the extent permitted by law. All attempts to secure your privacy will be used. You will be randomly assigned an identification number. All identifying information will be destroyed. In any sort of report we might publish, we will not include any information to further ensure your identify as a participant is protected. Research records will be stored securely and only researchers will have access to the records.

You will be given a copy of this informed consent form for your records upon request.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether to participate will not affect your relationship with the university. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

Debora Oliveira is the researcher conducting the study. You may ask questions now or later. She can be reached at or by email.

You may also contact:

Dr. Deborah Ebener

College of Education

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306-2742, or 850-644-8633, or by email at humansubjects@magnet.fsu.edu.

You may print a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. If I had any questions, I have asked them and have received answers. Continuing with the survey implies consent to participate.

APPENDIX E
LETTER TO FACULTY

Dear Professor,

I am a doctoral candidate in Rehabilitation Counseling and Services at Florida State University. I am collecting data for my dissertation, which focuses on gender differences in job satisfaction among rehabilitation counseling educators.

I would appreciate your time to complete the survey located at <http://www.survey.coe.fsu.edu/>. The survey will take approximately 45 minutes. Your confidentiality is ensured through the use of the anonymous survey and in the design of the research project.

I would appreciate your participation in this study. I will be looking at gender differences from one discipline across the United States. The most recent data on rehabilitation counselor educators will be gathered. It is a timely topic with the growing number of women earning doctorate degrees in rehabilitation counseling.

If you have any questions or concerns regarding this study, you may contact me or email me.

I appreciate your time and comments.

Sincerely,

Debora Oliveira

Doctoral Candidate

Florida State University

APPENDIX F
NCRE APPROVAL

Hello Deborah--Your proposal has been approved by the NCRE Research Committee, and you can now begin your data collection. Be sure to include the following statement on all recruitment materials: "This research project has obtained permission to gain access to the NCRE membership for purposes of furthering the mission of the association."

Good luck with your research. This is an important study, and I look forward to learning about your findings.

Sincerely,

Lynn Koch, Ph.D., CRC

Chair, NCRE Research Committee

----- Original Message -----

From: Debora Oliveira

Date: Sunday, January 16, 2011 9:51 am

Subject: Research proposal

To: lckoch@uark.edu

FIGURE 1

STANDARDIZED REGRESSION RESIDUALS

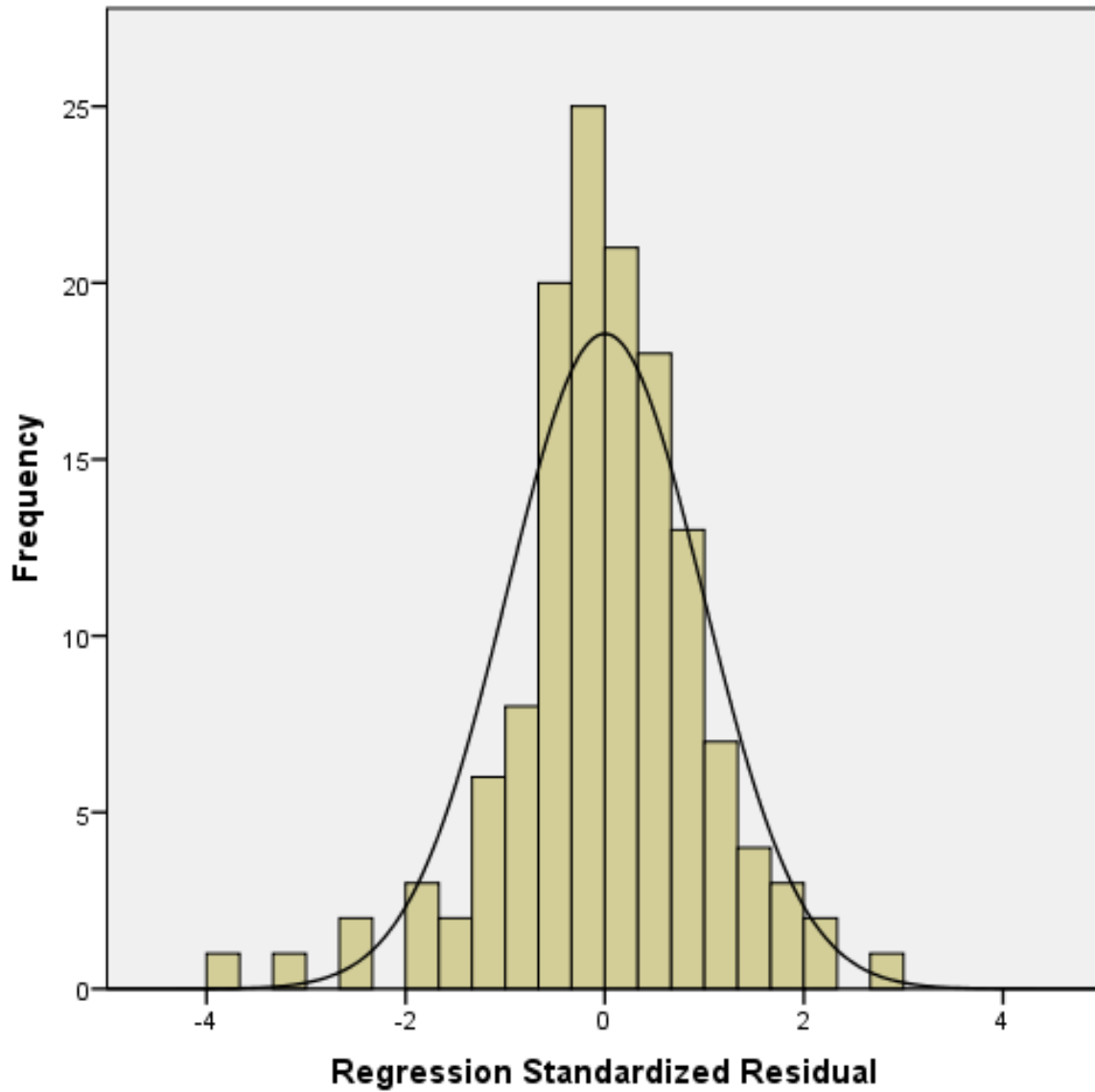


Figure 1. Histogram of standardized regression residuals for Null Hypothesis 1.

FIGURE 2

ESTIMATED MARGINAL MEANS FOR INTRINSIC
MOTIVATION SCORES AS A FUNCTION OF RANK.

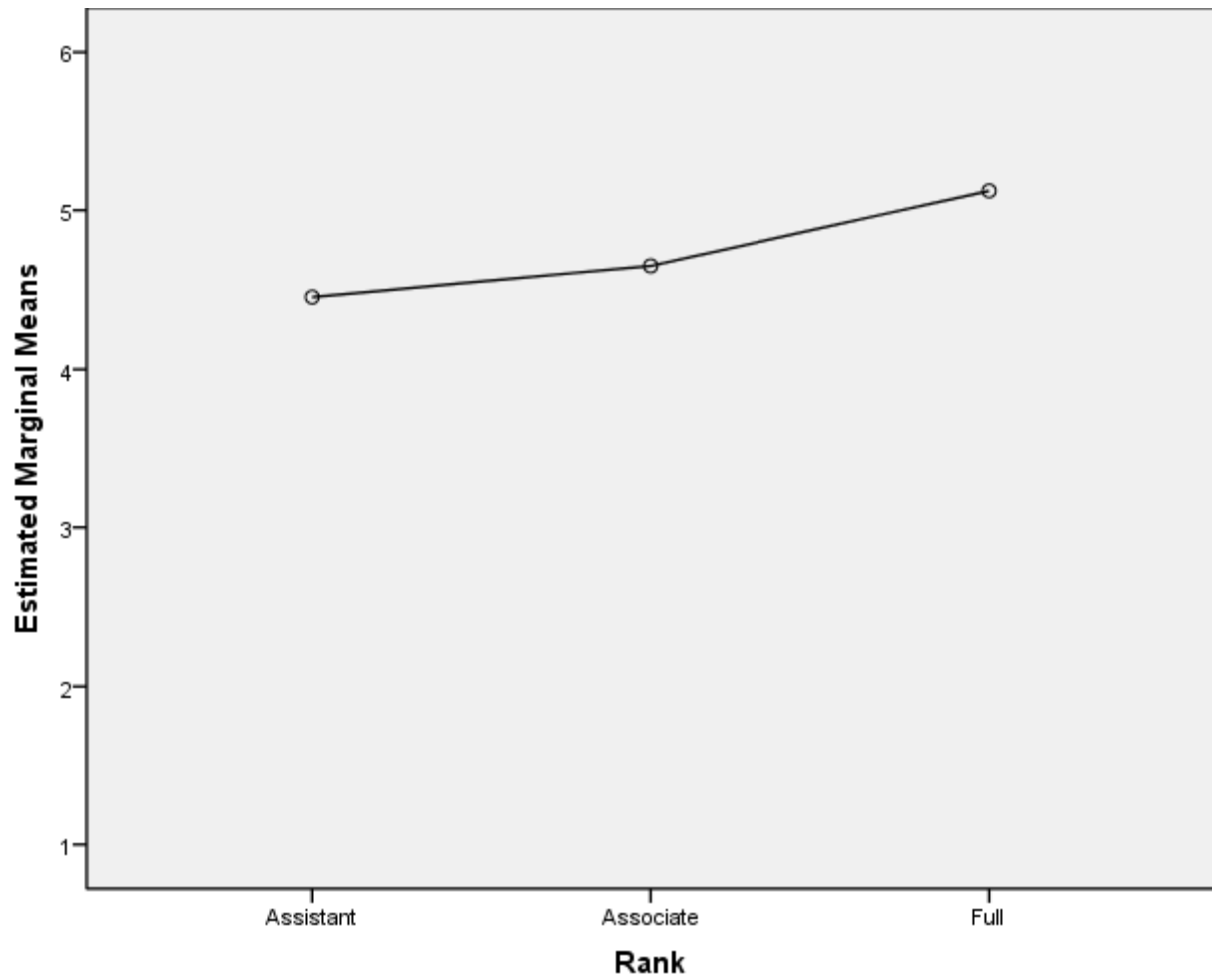


Figure 2. Estimated marginal means for intrinsic motivation scores as a function of rank.

FIGURE 3

ESTIMATED MARGINAL MEANS FOR EXTRINSIC
MOTIVATION SCORES AS A FUNCTION OF RANK.

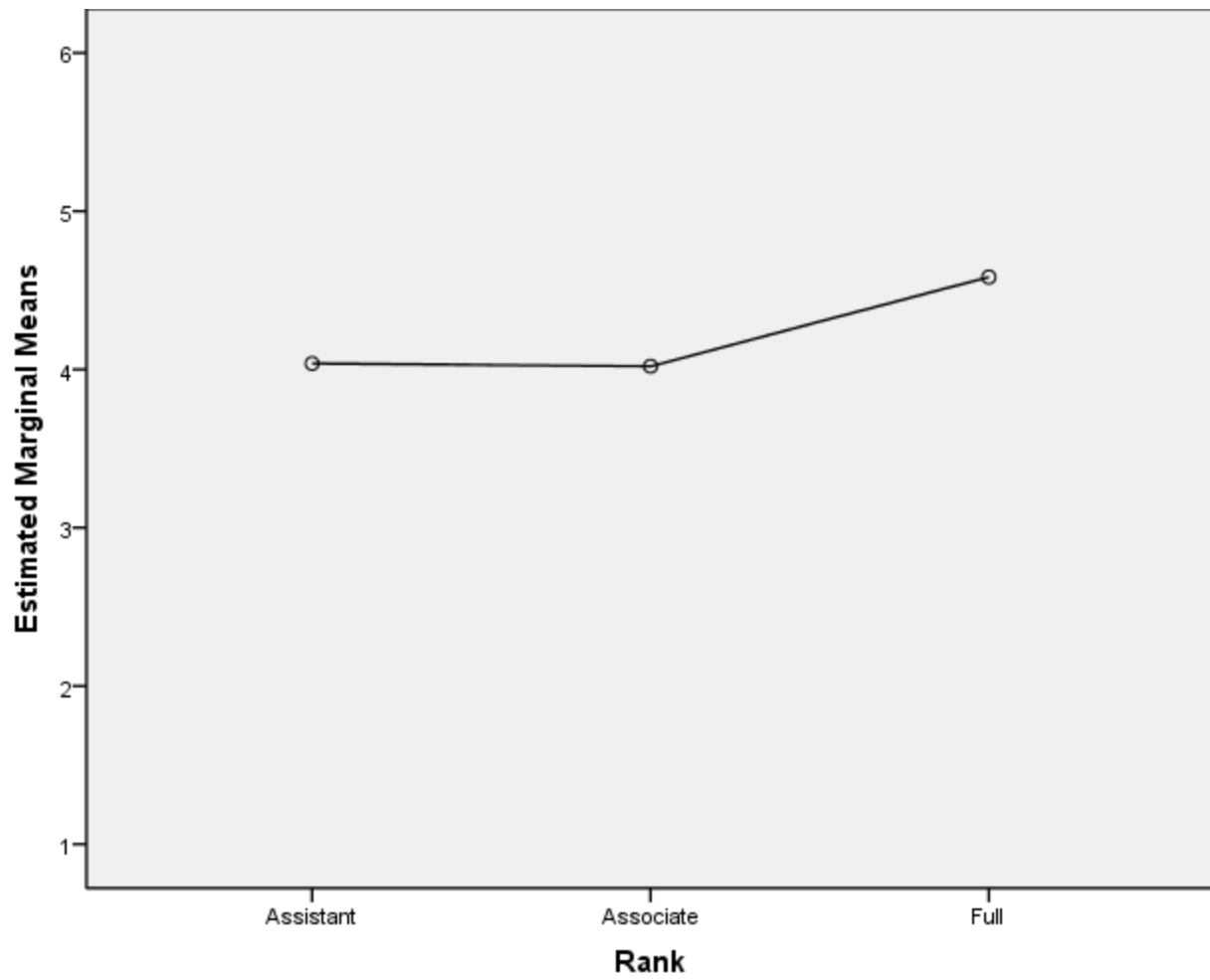


Figure 3. Estimated marginal means for extrinsic motivation scores as a function of rank.

FIGURE 4

STANDARDIZED REGRESSION RESIDUALS

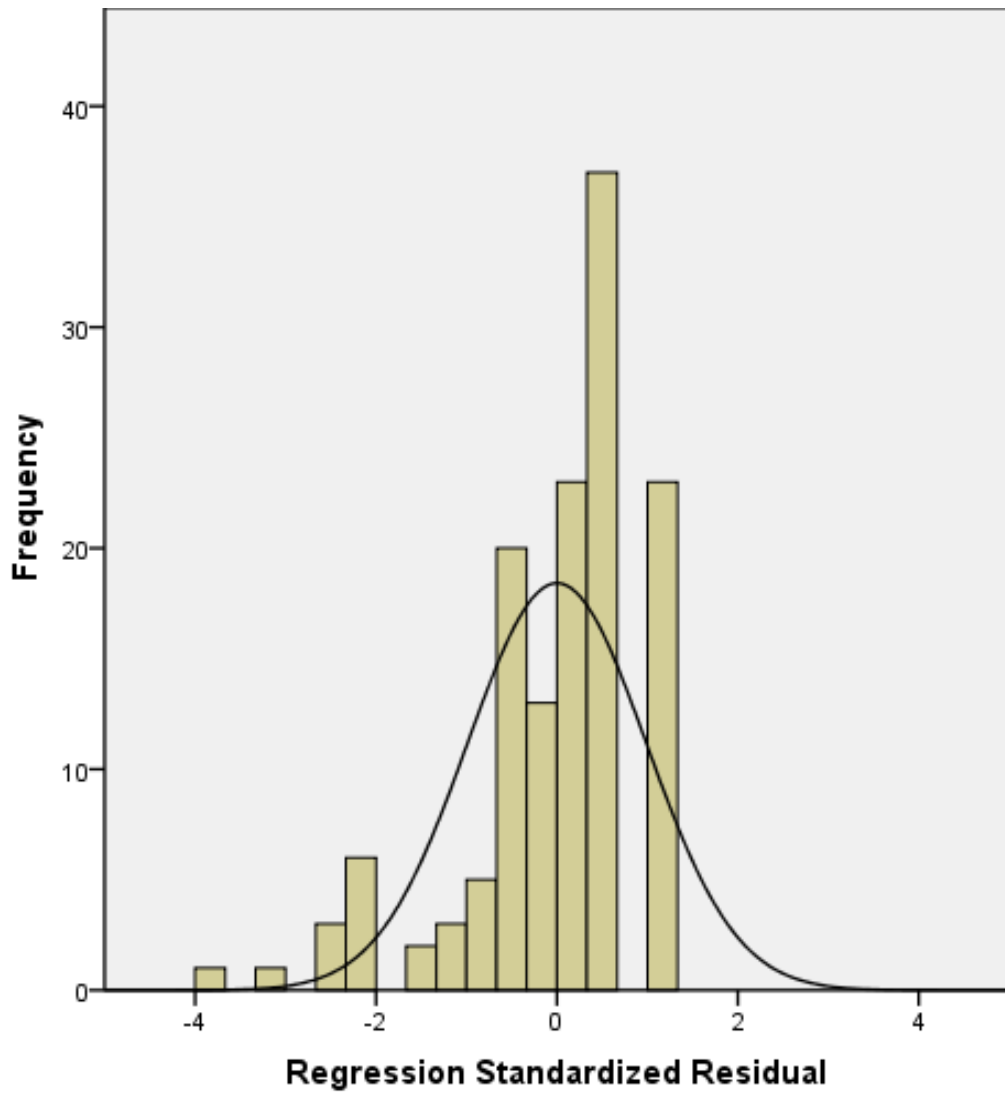


Figure 4. Histogram of standardized regression residuals for Null Subhypothesis 3.

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BIOGRAPHICAL SKETCH

In the spring of 1977 Debora Oliveira received a Bachelor of Science from the University of Wisconsin in Occupational Therapy. In 1992 she received a Master of Science in HealthCare Administration Services at NovaSoutheastern University. She obtained a Specialist degree in Education in Rehabilitation Counseling in 2008 from the Florida State University. Under the guidance of Dr. Deborah J. Ebener, she began her dissertation research to fulfill the requirements for the degree of Doctor of Philosophy in Rehabilitation Counseling.