



SCHOOL of  
GRADUATE STUDIES  
EAST TENNESSEE STATE UNIVERSITY

East Tennessee State University  
**Digital Commons @ East  
Tennessee State University**

---

Electronic Theses and Dissertations

---

5-2006

# An Investigation of Gender Differences in Motivation of Senior Administrators in Virginia Community Colleges Using Herzberg's Two-Factor Theory.

Jewell Bevins Worley  
*East Tennessee State University*

Follow this and additional works at: <http://dc.etsu.edu/etd>

---

## Recommended Citation

Worley, Jewell Bevins, "An Investigation of Gender Differences in Motivation of Senior Administrators in Virginia Community Colleges Using Herzberg's Two-Factor Theory." (2006). *Electronic Theses and Dissertations*. Paper 2176. <http://dc.etsu.edu/etd/2176>

This Dissertation - Open Access is brought to you for free and open access by Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact [dcadmin@etsu.edu](mailto:dcadmin@etsu.edu).

An Investigation of Gender Differences in Motivation of Senior Administrators  
in Virginia Community Colleges Using Herzberg's Two-Factor Theory

---

A dissertation  
presented to  
the faculty of the Department of Educational Leadership and Policy Analysis  
East Tennessee State University

In partial fulfillment  
of the requirements for the degree  
Doctor of Education

---

by  
Jewell Bevins Worley  
May 2006

---

Dr. Nancy Dishner, Chair  
Dr. Lee Daniels  
Dr. Hal Knight  
Dr. Terry Tollefson

Keywords: Motivation, Frederick Herzberg, Two-Factor Theory, Job Satisfaction  
Job Dissatisfaction

## ABSTRACT

### An Investigation of Gender Differences in Motivation of Senior Administrators in Virginia Community Colleges Using Herzberg's Two-Factor Theory

by

Jewell Bevins Worley

The purpose of this study was to examine the gender differences regarding motivation in the individuals who serve in senior administrative positions in Virginia's community colleges. Institutional morale can be damaged by administrators who become dissatisfied with their positions. Institutions use millions of dollars yearly to conduct searches for individuals to replace senior administrators who leave their positions because of lack of job satisfaction or high job dissatisfaction. This study also addressed the possibility of differences between male senior administrators and female senior administrators regarding job satisfaction and job dissatisfaction.

Frederick Herzberg's 2-factor theory of motivation regarding job satisfaction and job dissatisfaction was used as the theoretical foundation of the data collection. The Job Descriptive Index that focuses on 5 facets of job satisfaction: work on present job, opportunities for promotion, present pay, co-workers, and supervision as well as the Job in General Scale were used to survey senior college administrators for the purpose of gathering data.

Results of the study indicated that senior administrators experienced a high level of job satisfaction regarding work on present job, co-workers, supervision, and the overall job in general. Senior administrators reported low levels of job satisfaction in relation to opportunities for promotion and moderate levels of satisfaction regarding present pay.

Findings from the study reflected a difference in male senior administrators and female senior administrators regarding opportunities for promotion, co-workers, and the overall job in general. Male senior administrators reported higher levels of satisfaction in all 3 of these areas whereas

female senior administrators reported lower levels of satisfaction. There were no differences found between male senior administrators and female senior administrators regarding work on present job, present pay, or supervision.

## DEDICATION

This study is dedicated:

To my husband, Wayne Worley, who has been much more than a helpmate and whose love and encouragement have helped me to stay focused on the end result. He has lived this process with me on a daily basis. He has been patient and understanding throughout all the years that I have pursued my dreams, and he has fulfilled his commitment to my father to make sure that I finished college.

To my children, James and Christy Worley and Chuck and Erin W. Slemph, who unknowingly have motivated me to complete this journey so that I can be an example of a lifelong learner for them. My desire is for them to prosper in all they attempt, to find satisfaction in life, and to enjoy the pursuit of education as much as I have.

To my first grandchild, Clara Renay Worley, and to my grandchildren yet to be born who have brought and who will bring more joy to my life than words can express! My prayer is that each of them will love life, will cultivate wisdom, and will develop a love of reading --a true "Lifetime Passport" to learning.

To my grandmother, Ida Cook Bevins, who remains an example of a life well lived. She has loved me unconditionally, encouraged me to pursue my dreams, and taught me that one can truly learn something new every day.

To my sisters, Rhonda Greear, Paula DuVal, Nancy Wheatley, Melissa Bevins, and Suzy Mullins, who have been encouraging every time I have declared my intent to return to school. Their love is truly "the tie that binds."

To the memory of my parents, Billy Joe and Coleen Bevins, who taught me to take every opportunity that comes my way. They were educators who believed that in order to change one's life, one must seek an appropriate education.

## ACKNOWLEDGMENTS

I would like to express my gratitude to my chairperson and friend, Dr. Nancy Dishner. Her positive, and often humorous, outlook on life has been a constant source of encouragement and inspiration during this process. As I think of role models for lifelong learning and leadership, Nancy will always come to mind.

I would like to thank Dr. Hal Knight whose enthusiasm for his subject matter sparked an interest in me and provided me with the topic for my dissertation.

My gratitude goes to Dr. Terry Tollefson who was the first member of the ELPA family I met. He created a welcoming environment for this nontraditional student and initially provided the encouragement that I could truly meet my goal of completing a doctorate.

I am also grateful to Dr. Lee Daniels, the cognate member of my committee, who provided me with an idea for yet another profession.

Special acknowledgement goes to Dr. Susan Twaddle who acted as my consultant in the data analysis process. Her ability to teach and encourage are gifts to be shared with all ELPA students and I feel especially blessed to have been one such student.

I also want to acknowledge my editor, Debby Bryan. She possesses a unique ability in the process of editing and her work on my behalf is greatly appreciated.

Special thanks go to my friends, especially those from The University of Virginia's College at Wise campus community, the Division of Student Affairs, and the "women who rock" (Lelia, Sheila, Kathy, Karen, and Julie) in the Center for Student Development and Leadership, and to my family members who have laughed, cried, and prayed with me, and continued to support my work and my dreams. Thank you for continuously enriching my life.

## CONTENTS

	Page
ABSTRACT .....	2
DEDICATION .....	4
ACKNOWLEDGMENTS .....	5
LIST OF FIGURES .....	10
Chapter	
1. INTRODUCTION .....	11
Statement of the Problem.....	16
Research Questions.....	17
Significance of the Study .....	18
Definitions .....	19
Delimitations and Limitations .....	21
Overview of the Study .....	21
2. REVIEW OF RELATED LITERATURE .....	22
Introduction.....	22
Overview of Motivational Theories.....	22
Frederick Herzberg's Two-Factor Theory.....	30
A Critical Look at Herzberg's Two-Factor Theory.....	45
Summary.....	48
3. METHODS AND PROCEDURES.....	49
Introduction.....	49
Research Design .....	49

Chapter	Page
Participants.....	50
Instrumentation .....	51
Data Collection .....	53
Data Analysis .....	54
Research Questions.....	55
Hypotheses .....	55
Summary .....	56
4. ANALYSIS OF THE DATA.....	57
Analysis of the Research Questions.....	58
Research Question #1 .....	58
Opportunities for Promotion.....	59
Research Question #2 .....	60
Present Pay.....	60
Co-Workers.....	61
Supervision .....	62
Research Question #3 .....	63
Job in General .....	63
Research Question #4 .....	64
Work on Present Job .....	64
Opportunities for Promotion.....	65
Research Question #5 .....	66
Present Pay.....	66
Co-Workers.....	67
Supervision .....	68



Chapter	Page
Research Question #6 .....	69
Job in General .....	69
Summary .....	70
5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .....	72
Summary of Findings .....	72
Research Question #1 .....	73
Research Question #2 .....	73
Research Question #3 .....	73
Research Question #4 .....	74
Research Question #5 .....	74
Research Question #6 .....	75
Conclusions .....	76
Recommendations for Practice .....	79
Recommendations for Further Research .....	81
REFERENCES .....	82
APPENDICES .....	87
Appendix A: Supplemental List of Databases Reviewed .....	87
Appendix B: Job Descriptive Index and the Job in General Scale .....	88
Appendix C: Letter to Dr. Glenn DuBois .....	91
Appendix D: Letter to Dr. Charlie White .....	92
Appendix E: Approval Letter from Dr. DuBois. ....	93
Appendix F: Letter to the Community College Presidents .....	94
Appendix G: Cover Letter to Senior Administrators .....	95
Appendix H: Institutional Review Board Forms .....	96

Chapter	Page
Appendix I: Follow-Up Letter to Senior Administrators.....	100
VITA .....	101

## LIST OF FIGURES

Figure	Page
1. Maslow's Hierarchy of Needs .....	27
2. Histogram for Work on Present Job.....	58
3. Histogram for Opportunities for Promotion .....	59
4. Histogram for Present Pay .....	60
5. Histogram for Co-Workers .....	61
6. Histogram for Supervision.....	62
7. Histogram for Job in General.....	63
8. Boxplots for Job Satisfaction With Work on Present Job by Gender.....	64
9. Boxplots for Job Satisfaction With Opportunities for Promotion by Gender.....	65
10. Boxplots for Job Satisfaction With Present Pay by Gender .....	66
11. Boxplots for Job Satisfaction With Co-Workers by Gender .....	67
12. Boxplots for Job Satisfaction With Supervision by Gender .....	68
13. Boxplots for Job Satisfaction With Job in General.....	69

## CHAPTER 1

### INTRODUCTION

Higher education has become a very competitive business. Pulliam and Van Patten (2003) reported, “The 500,000 students enrolled in college in 1918 seems a very small number compared with today’s figure, which exceeds 16 million students” (p. 200). According to the *Chronicle of Higher Education* (“Enrollment and Student Aid,” 2004), the enrollment for all postsecondary students was 16,361,000 in 2003. Projected enrollment for all institutions, both public and private and both two- and four-year institutions, is expected to increase by 5% or 807,000 students over a 5-year period (from fall 2003 to fall 2008). Over a 10-year period, enrollment is projected to increase by 11% or 1,790,000 more students (from fall 2003 to fall 2013) (“Enrollment and Student Aid,” p. B17).

An area in higher education that is growing steadily to accommodate the need for alternative degree programs is the junior/community college. According to Pulliam and Van Patten (2003), “By 1997, more than 1,473 junior and community colleges were operating with a combined enrollment of over five million students. National efforts are under way to expand opportunities for education through the 14<sup>th</sup> grade or the community college level” (p. 201). In addition to the traditional mission of community colleges regarding vocational and technical education, “Community colleges have established or strengthened relationships with businesses and industries. These relationships are becoming increasingly complex and multidimensional” (Tollefson, Garrett, Ingram, & Associates, 1999, p. 17).

Because enrollments are growing steadily and with the increase in competition, Pulliam and Van Patten (2003) suggested that higher education administrators are faced with new challenges such as “demands for more information, including graduate and retention rates especially for minorities, faculty workload, staff and administration evaluation, class size, and other measures of accountability” (p. 200).

As expectations for services continue to grow, senior administrators in institutions of higher education, particularly in community colleges, are faced with professional and personal demands that for even the most experienced managers can be very challenging both mentally and physically. Rice (2003) noted, “As our educational systems increase in size and complexity, more thought should have been given to the changing nature of the economy, leadership and management practices, and employee job satisfaction” (p. 7). An individual’s job performance can be influenced by the overall satisfaction he or she experiences from the work environment. Thompson (2001) pointed out, “Understanding factors that influence employee job satisfaction levels are essential to improving the well-being of employees and to motivate employees toward improved organizational outputs” (p. 58).

One theory frequently used to assess levels of job satisfaction is Herzberg’s (1966) two-factor theory of motivation. Originally based on ideas derived from a study of 200 accountants and engineers regarding situations that had produced a significant increase in individual job satisfaction or had resulted in a decrease in job satisfaction, Herzberg (1966) determined that elements that produced job satisfaction were “*separate* and *distinct* from the factors that led to job dissatisfaction” (pp. 75-76).

Herzberg’s (1966) theory contained the idea of two separate factors, one intrinsic in nature and the other extrinsic, that impact individual motivation. Herzberg (1966) maintained that “intrinsic factors” are directly associated with satisfaction. He provided examples of intrinsic factors relating to an individual’s work that included recognition, personal achievement, success, and work itself. Dissatisfaction was associated with “extrinsic factors” including working conditions, supervision, and salary. According to Owens (2001), “They [employees] attribute motivational characteristics to themselves and attribute dissatisfaction to characteristics of the organization” (pp. 360-361).

Owens (2001) reported that Herzberg’s theory contained the idea that motivation is much broader than one individual factor or “dimension” (p. 358). Instead, Herzberg recommended a

two-factor theory that suggested motivation was related to job satisfaction or dissatisfaction. Prior to the time of Herzberg's research, the thought was that job dissatisfaction and job satisfaction were opposites. Herzberg suggested, however, that these two concepts are not opposites. Rather, the opposite of job satisfaction would not be job dissatisfaction, but rather "no job satisfaction: similarly, the opposite of job dissatisfaction is no job dissatisfaction, not satisfaction with one's job" (Herzberg, 1966, p. 76).

Iacqua, Schumacher, and Li (1995) proposed:

The dual factors [intrinsic and extrinsic] arise from alternate needs that spring from basic animal nature, a drive to avoid pain from the environment, and all the learned drives that are built on those basic needs. For example, an extrinsic factor, the drive to earn a good salary, is built upon the basic need of hunger. However, intrinsic factors such as responsibility and the satisfaction with work itself arise from the human ability to personally grow. (p. 51)

Herzberg (1966) established what were termed "hygiene" or "maintenance" factors (p. 74). He viewed these hygiene factors as being characteristic of prevention (i.e. prevent the occurrence of dissatisfaction). These factors included improving working conditions, encouraging administrators to be more personable or empathetic, and revising the salary and benefits package. Herzberg (1966) reported that one could improve the above-mentioned areas and reduce dissatisfaction but neither motivate workers nor produce job satisfaction. In addition, Rantz, Scott, and Porter (1996) suggested, "Dissatisfaction factors will move workers temporarily but not motivate them. For motivation to occur, satisfaction [involving a different set of factors] must come into play" (p. 30).

Herzberg (1966) maintained that motivation was inspired by a different set of conditions that are not associated with dissatisfaction. He used the term "motivators" because these factors appeared "effective in motivating the individual to superior performance and effort" (p. 74). Herzberg (1966) identified motivating factors or "motivators" as being the possibility of promotions, responsibilities, and challenges associated with the work, and recognition. He

advocated the idea that maintenance or hygiene factors do not motivate workers but instead create an atmosphere for satisfaction to occur. According to Herzberg (1966):

Since the dissatisfier factors essentially describe the environment and serve primarily to prevent job dissatisfaction while having little effect on positive job attitudes, they have been named the *hygiene* factors . . . One cluster of factors relates to what the person does and the other to the situation in which he does it. (p. 74)

Herzberg (1987) conducted numerous studies that applied the two-factor theory to a variety of work environments. As shown in Table 1, Herzberg (1987) illustrated that motivators were the primary cause of satisfaction and hygiene factors the primary cause of unhappiness on the job.

Table 1

*Factors Affecting Job Attitudes as Reported in 12 Investigations*

Factors characterizing 1,844 events on the job that lead to extreme dissatisfaction	FACTOR	Factors characterizing 1,753 events on the job that led to extreme satisfaction
11%	Achievement	40%
9%	Recognition	30%
13%	Work itself	21%
4%	Responsibility	20%
6%	Advancement	10%
5%	Growth	8%
35%	Company policy and admin.	3%
20%	Supervision	4%
10%	Relationship with supervisor	5%
10%	Work conditions	2%
8%	Salary	7%
6%	Relationship with peers	4%
4%	Personal life	1%

Table 1 (continued)

Factors characterizing 1,844 events on the job that lead to extreme dissatisfaction	FACTOR	Factors characterizing 1,753 events on the job that led to extreme satisfaction
5%	Relationship with subordinates	4%
3%	Status	2%
2%	Security	1%
69%	TOTAL HYGIENE	19%
31%	TOTAL MOTIVATORS	81%

The data presented in Table 1 are a summary of 12 different studies. Herzberg (1987) reported that the employees who participated in these studies “included lower level supervisors, professional personnel, manufacturing supervisors, nurses, food handlers, military officers, engineers, scientists, housekeepers, teachers, technicians, female assemblers, accountants, Finnish foremen, and Hungarian engineers” (p. 113).

Although Herzberg’s two-factor theory or motivation-maintenance theory has been researched and applied to a variety of work settings including faculty job satisfaction in the community college setting (Geiger, 2002; McCracken, 2001; Rice, 2003) and data have been collected from employees involved in a variety of professions, there is little research using Herzberg’s two-factor theory with administrators who work in the higher education setting particularly in community colleges (a supplemental list of databases that were reviewed for research studies is included as Appendix A).



### *Statement of the Problem*

Millions of dollars are invested by colleges each year to conduct searches and place individuals who are “the best fit” into positions vacated by other senior administrators. Murray, Murray, and Summar (2000) reported:

Numerous researchers have demonstrated that a dissatisfied college administrator can have injurious effects on morale as a result of administrative influence . . . when the tensions become too great for the administrator to bear or the administrator’s ineffectiveness creates an intolerable organizational climate, the administrator will leave. (p. 24)

Furthermore, the authors reported that high turnover rates among senior administrators can be “costly to an institution both economically and in terms of lost opportunities” (p. 24).

Cano and Miller (1992) pointed out, “The negative effects of job turnover on organizations may include increased costs to recruit, select, and train new employees; demoralization of remaining employees; negative public relations; disruption of day-to-day activities; decreased organizational opportunities to pursue growth strategies” (p. 9). Glick (1992) reported that changes in senior managerial positions “can cost an organization from 5 to 25 times an employee’s monthly salary” (p. 627).

In addition, Balzer et al. (1997) reported that a majority of employers would favor providing jobs that create a “high quality of work life for their employees, which may result in high levels of employee satisfaction” (p. 43). However, before organizations and companies can rationalize allocating money to support efforts directed toward improving job satisfaction, employers need to gather data. According to Balzer et al.:

To justify expenditures, organizations often wish to gather evidence that the personnel procedures and policies and organizational change efforts that are proposed to improve job satisfaction (providing well-paid and personally involving work, friendly co-workers and effective leaders, and so on) have proved cost-effective (led to improvements in productivity, efficiency, profitability, and so on). In this latter case, evidence is required that clearly indicates that improvements have been effective. Gathering this evidence not only assists management in making informed human resource decisions, but also contributes to the understanding of how job satisfaction fits into the complex picture of work motivation and job-related performance. (p. 43)

Considering the negative effects of personnel changes at the senior administrative level and the cost to institutions to conduct searches, an investigation of what factors motivate senior administrators is warranted. What elements of job satisfaction and dissatisfaction are the most likely to influence an individual's decision to remain in a particular administrative position or seek employment elsewhere? Moreover, are the elements of job satisfaction and dissatisfaction different regarding gender?

The purpose of this study was to assess motivational factors in senior administrators in the Virginia community college setting employing Herzberg's (1966) idea of job satisfaction and job dissatisfaction and to determine if there were differences between the genders with regard to motivation.

#### *Research Questions*

1. What are the job satisfaction levels of senior administrators in Virginia's community colleges on the motivational factors for work on present job and opportunities for promotion?
2. What are the job satisfaction levels of senior administrators in Virginia's community colleges on the hygiene factors for pay, co-workers, and supervision?
3. What is the overall job satisfaction level of senior administrators in Virginia's community colleges on job in general?
4. Are there differences between male and female senior administrators in Virginia's community colleges regarding the motivational job satisfaction factors for work on present job and opportunities for promotion?
5. Are there differences between male and female senior administrators in Virginia's community colleges regarding the hygiene job satisfaction factors for pay, co-workers, and supervision?

6. Is there a difference between male and female senior administrators in Virginia's community colleges regarding overall job satisfaction for job in general?

### *Significance of the Study*

This study could have implications for college administrators in regard to disclosing factors relating to job satisfaction and job dissatisfaction that might impact the retention rate among professionals who currently serve in senior administrative positions. According to Herzberg (1966):

Motivators are the primary cause of satisfaction, and hygiene factors the primary cause of unhappiness on the job. The motivation-hygiene theory suggests that work can be enriched to bring about effective utilization of personnel . . . The term, job enrichment, describes this embryonic movement . . . Job enrichment provides the opportunity for the employee's psychological growth . . . Not all jobs can be enriched, nor do all jobs need to be enriched. If only a small percentage of the time and money that is now devoted to hygiene, however, were given to job enrichment efforts, the return in human satisfaction and economic gain would be one of the largest dividends that industry and society have ever reaped through their efforts at better personnel management. (p. 10)

This study addressing job satisfaction and job dissatisfaction as reported by both male and female Virginia community college senior administrators might provide educational administrators with data that should serve several purposes. College administrators could use the information generated by this study to gain important information regarding elements that produce job satisfaction and job dissatisfaction. The information might be used to plan appropriate interventions in areas where job satisfaction is reported as low and job dissatisfaction is reported as high and to maintain job satisfaction where it is reported as high. In addition, educational administrators might examine these data to determine if the needs of senior male and senior female administrators are different. Administrators might examine appropriate ways to improve senior administrators' job satisfaction for both males and females with organized plans to provide leadership training and administrative support services.

This study should also be of interest to those individuals who are contemplating jobs as senior administrators in a community college setting. Information relating to job satisfaction and

job dissatisfaction as reported by senior administrators of both genders is an important component to consider when making career decisions regarding the choice to seek employment at the senior administrative level. According to Tedrow and Rhoads (1999), only a small amount of research has been conducted exploring elements that serve to shape career paths of women who work at community colleges; although, “Community colleges are interesting sites for analyzing women’s leadership” (p. 1).

Finally, this study was conducted in response to a need for data regarding the idea of motivation among senior administrators who directly affect the quality of education in the Virginia Community College System. This study is expected to add to the general body of knowledge regarding job satisfaction and job dissatisfaction as elements of motivation.

### *Definitions*

For the purpose of this study, the following definitions were used:

1. *Gender*: Either male or female.
2. *Hierarchy of Needs*: A motivational theory developed by Abraham Maslow based on the belief that individuals have an internal drive to reach “their full growth potential.” As individuals strive to reach this potential, they begin with the initial needs based on survival. The motivation to reach their full potential “unfolds in an orderly, sequential hierarchical pattern that takes us toward continued growth and development” (Owens, 2001, p. 353).
3. *Hygiene-motivation theory* (also called the two-factor theory): Herzberg’s theory proposes that factors relating to job satisfaction are “motivators” including the satisfaction of work itself, achievement, responsibility, opportunities for growth and advancement, and recognition. Factors relating to job dissatisfaction called “hygiene elements” or maintenance factors include the individual’s relationship with his or her

- supervisor, company policy, working conditions, general management, and salary (“Frederick Herzberg: The hygiene-motivation theory,” 1999, n. p.).
4. *Job dissatisfaction*: Herzberg (1966) suggested that job dissatisfaction was not the opposite of job satisfaction; rather, “The opposite of job dissatisfaction is no job dissatisfaction, not satisfaction with one’s job”; on one’s job, the “dissatisfiers consistently produced short-term changes in job attitudes. The major dissatisfiers were company policy and administration, supervision, salary, interpersonal relations and working conditions” (p. 76). According to Herzberg (1966), dissatisfaction with one’s job is described by one’s “relationship to the context or environment in which he does his job” (p. 76).
  5. *Job satisfaction*: Spector (1997) defined job satisfaction as “simply how people feel about their jobs and different aspects of their jobs. As it is generally assessed, job satisfaction is an attitudinal variable . . . a related constellation of attitudes about various aspects or facets of the job” (p. 2). According to Herzberg (1966), “The factors involved in producing job satisfaction were *separate* and *distinct* from the factors that led to job dissatisfaction” (p. 75) and included “achievement, recognition, work itself, responsibility and advancement---the last three being of greater importance for lasting change of attitude” (p. 72).
  6. *Motivation*: “The forces that cause people to behave as they do. It is thought by behaviorists to be extrinsic (the carrot and the stick) and by others to be intrinsic” (cognitive and emotional, e.g. feelings, aspirations, attitudes, thoughts, perceptions, etc.) (Owens, 2001, p. 400).
  7. *Senior administrator*: Vaughan (1990) defined high-ranking administrators as “academic dean, academic vice-president, vice-president for instruction, instructional dean, and dean of the college . . . community colleges often use the title ‘provost’ to designate the head of a campus in multicampus or multicollege operations” (p. 6).

Senior administrators also include individuals who function as presidents of community colleges or as deans of departments.

### *Delimitations and Limitations*

This study was delimited to an investigation of senior administrators in Virginia's 23 community colleges and its associated satellite campuses. The findings of this study cannot be generalized to other state community college systems or other colleges and universities.

In addition, the study was limited by the inclusion of only one demographic feature, that of gender. The study was also limited by the survey instrumentation that included the use of the Job Descriptive Index and the Job in General Scale.

Finally, the study was limited by the methodology. Thomas and Brubaker (2000) suggested that a potential weakness to this type of research methodology was associated with certain topics. Thomas and Brubaker reported, "Certain topics [i.e. job satisfaction] may elicit socially desirable responses that may or may not reflect truthful responses. Further, answering truthfully and completely may jeopardize the participant's anonymity and confidentiality" (p. 118).

### *Overview of the Study*

This study was organized into five chapters. Chapter 1 provided an introduction to the study as well as a statement of the problem, pertinent research questions, significance of the study, definitions of terms, and delimitations and limitations. Chapter 2 presents a review of literature related to the issues the study addressed. Chapter 3 focuses on the research methodology and design. Chapter 4 includes a discussion of the findings of the study. Chapter 5 includes a summary based on data analysis, conclusions, and recommendations.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

#### *Introduction*

The purpose of this chapter is to review the literature and research related to motivational theories both past and present. Also presented in this chapter is a review of literature regarding Frederick Herzberg's two-factor theory as well as a review of research that applies Herzberg's two-factor theory to the study of job satisfaction and job dissatisfaction. Literature providing a critical look at Herzberg's theory is reviewed.

#### *Overview of Motivational Theories*

As early as the 1950s, Lindzey (1958) reported, "No area of psychology has been subjected to a more prolonged and less systematic scrutiny as has the domain of motivation" (p. 3). Today, two major ideas are dominant in motivational thought regarding organizational behavior.

Owens (2001) referred to the first of the two ideas as "the age-old metaphor of the carrot and the stick, which prescribes that a combination of proffering some mix of rewards and punishments is a way to motivate people in organizational life." (p. 332). This idea was related to behavioral psychology that espoused the idea that stressed external control of the individual. The other idea, as reported by Owens, was "associated with both cognitive psychology and humanist psychology; it [the other idea] emphasizes the psychic energy of internal thoughts and feelings as the primary source of motivation" (p. 332).

During the same time that Sigmund Freud was investigating the motives underlying his patients' dreams, an American psychologist, Edward L. Thorndike began motivation and learning studies using chickens, kittens, and dogs. The time was the 1890s. American psychologists during this period "were beginning to define psychology as the study of such

behavior, that is, of concrete, observable and recordable acts rather than inner wishes, thoughts, and expectations, which they did not know how to measure objectively” (McClelland, 1987, p. 69-70).

McClelland (1987) reviewed a number of Thorndike’s experiments that were conducted in 1911 and involved hungry animals and their attempts to get out of a box in order to reach a food source. As reported by McClelland, Thorndike used the term “impulse” in place of terms he believed to be too subjective such as “desire” or “motive.” (The term drive has since been employed by behaviorists to replace impulse). Thorndike eventually came to define the term [impulse] as a “state of affairs that proves satisfying for the animal and which the animal does not attempt to avoid, actually doing certain things to attempt to preserve and attain it [the “state of affairs”] (p. 70). The animal attempts to abandon or avoid any state of affairs that is either annoying or discomforting.

Another researcher, known for his work in behaviorism, was B. F. Skinner. According to McClelland (1987), although Skinner and later other behavioral researchers recommended that “theories of learning relating to reinforcers” should be used to refer to the “drives” [Skinner’s word for impulses] in an organism, “Thorndike’s observations are as true today as when he first made them; drives or motives serve to energize, to orient, and select behavior” (p. 71).

Jung (1978) also examined Skinner's research reporting that Skinner was an “extreme behaviorist who advocated for the concept of motive as “superfluous.” (p. 6). According to Jung, Skinner espoused the idea:

If we know the external stimulus conditions that exist when responses are learned, we can predict behavior as well, if not better, without recourse to the inference of internal states such as motives, cognitions, and feelings. Because these inner forces or causes are hypothetical and cannot be observed directly, these behaviorists feel we should not postulate them when we can identify the objective conditions associated with behavior. (p. 6)

Jung (1978) reported on the research of another behaviorist, D. J. Bem, whom Jung referred to as extremist. Jung pointed out that Bem espoused the idea that the individual is one



who acts first and then later identifies his or her motive. Jung considered, “In essence, Bem [was suggesting] that the actor examines his or her own behavior, just as an observer would, in attempting to infer inner feelings” (p. 6).

The behaviorist approach of motivation, that people can be motivated through manipulation of positive reinforcers (the carrot) and negative reinforcers (the stick), has been widely embraced and used in educational organizations. This idea of motivation is evident in the public school setting through “merit pay plans, demands for accountability, emphasis on formal supervision, annual performance reviews tied to reappointment to position, and teacher recognition days” (Owens, 2001, p. 332).

According to Owens (2001), the behaviorist approach is also employed in universities as reflected in the following:

Universities often practice an “up-or-out” policy to motivate newly appointed junior faculty members. They are commonly given a stipulated number of years to demonstrate growing research production through publication of their works; at the end of the time period, they know that they may be either rewarded for their behavior by being promoted and granted tenure or punished by dismissal. (p. 332)

However, not everyone supports the carrot-and-the-stick approach to motivation as espoused by the behaviorists. Of the carrot-and-the-stick approach, Owens (2001) reported one of the major criticisms of the behaviorists’ idea of motivation was that “it, in fact, does not deal with motivation at all” (p. 332).

Owens (2001) reported, “Although people can be *controlled* by external forces such as rewards and punishment, a crucial factor in the *motivation* of people lies within the individuals themselves” (p. 332). The humanistic and cognitive approaches of motivation are grounded in the idea that individuals grow and develop “both physiologically and psychologically from biological givens” (p. 332). Owens described the cognitive and humanistic approaches:

The internal capacities of individuals, primarily emotional and cognitive, give rise to feelings, aspirations, perceptions, attitudes, and thoughts, and it is these that can be motivating or demotivating. In this view, motivation is thought of as creating conditions in the organization that facilitate and enhance the likelihood that the internal capacities of members will mature both intellectually and emotionally, thus increasing their inner

motivation. In sum, the behaviorist tends to view motivation as something that one does *to* people, whereas the cognitive or humanist tends to view motivation as tapping the inner drives of people by creating growth-enhancing environments. (pp. 332-333)

In the 1940s and 1950s, Abraham Maslow and Carl Rogers became proponents of the idea of humanistic theories of motivation. The humanistic ideas regarding motivation were focused on the thought that "personal needs to constantly grow and develop, to cultivate personal self-esteem and to have satisfying human relationships are highly motivating drives" (Owens, 2001, p. 352). Hockenbury and Hockenbury (2003) reported that Rogers and Maslow did not reduce the importance of external and biological motivators but instead stressed, "Humanistic theories emphasized psychological and cognitive components in human motivation. According to the humanistic perspective, people are motivated to realize their highest personal potential" (p. 324).

Rogers, who became a psychotherapist after studying theology and determining he did not want to be a minister, based his theoretical work on experiences with his "clients" (Rogers's term for patients). Rogers' contention was, "The most basic human motive is the *actualizing tendency*--the innate drive to maintain and enhance the human organism" (as cited in Hockenbury & Hockenbury, 2003, p. 472). At the foundation of the idea of the actualizing tendency was *self-concept*--a term that Rogers defined as a group of beliefs and perceptions an individual develops about himself or herself including each individual's behavior, personal qualities, and nature. Rogers's theory of motivation was based on the idea that "People are motivated to act in accordance with their self-concept. So strong is the need to maintain a consistent self-concept that people will deny or distort experiences that contradict their self concept" (as cited in Hockenbury & Hockenbury, p. 472).

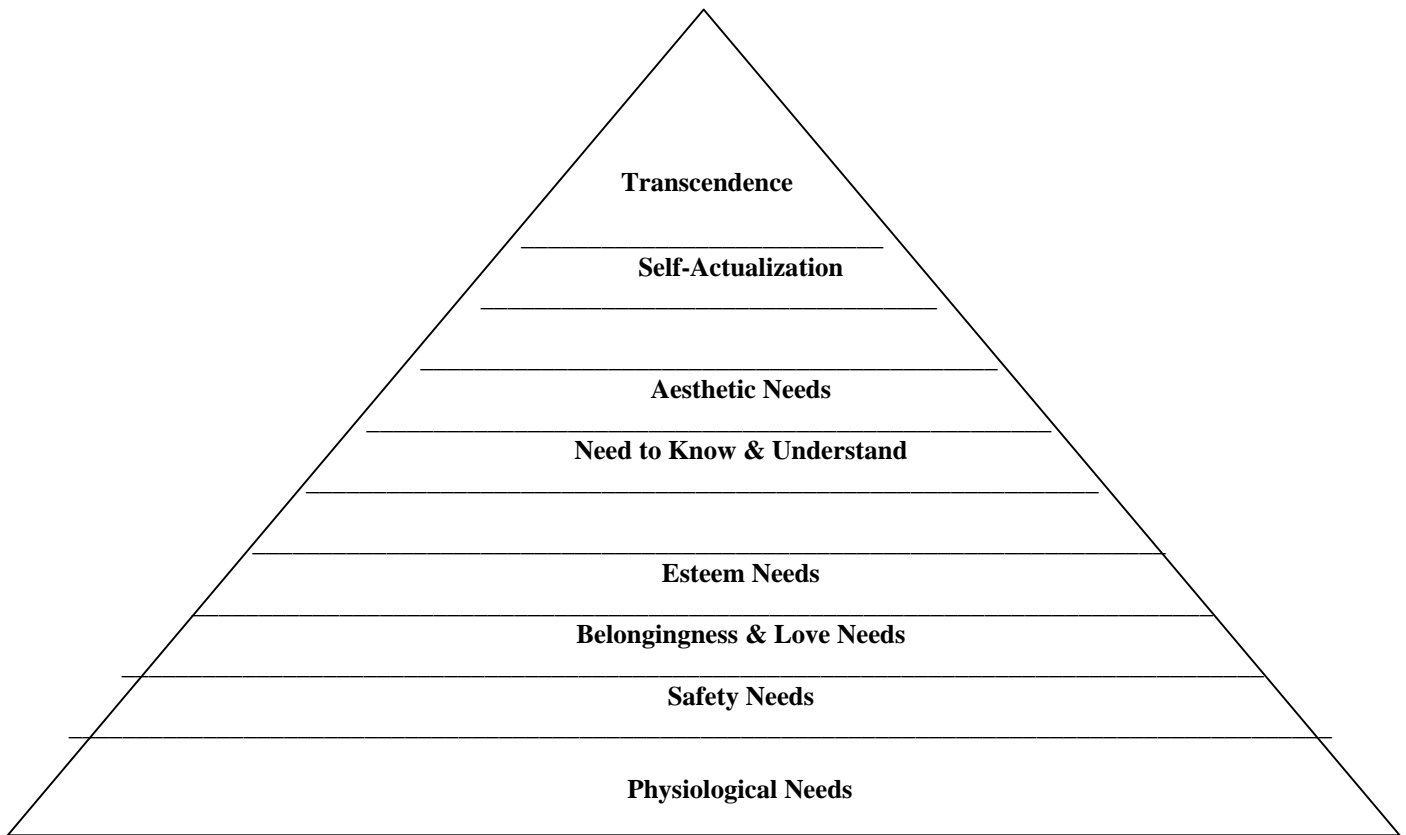
Maslow (1970) proposed that an individual was an integrated, organized whole. He suggested that psychologists, even though they accepted this fact on some level, proceeded to ignore the wholeness of the individual during experiments. Maslow (1970) espoused the idea:

It is an experimental reality as well as a theoretical one [i.e. an individual as "an integrated, organized whole"] must be realized before sound experimentation and sound

motivation theory are possible. In motivation theory, this proposition means many specific things. For instance, it means the whole individual is motivated rather than just a part of him. In good theory, there is no such entity as a need of the stomach or mouth, or a genital need. There is only a need of the individual. It is John Smith who wants food, not John Smith's stomach. Furthermore, satisfaction comes to the whole individual and not just a part of him. Food satisfies John Smith's hunger and not his stomach's hunger. (p. 19)

Hockenbury and Hockenbury (2003) reviewed the research of Abraham Maslow who recognized the contribution of biologically based needs to the field of motivational studies. According to the authors, Maslow suggested that after an individual's fundamental biological needs were met, then the "higher needs" relating to psychological requirements appeared. This idea was the foundation of Maslow's "hierarchy of needs" (p. 338).

According to Huitt (2004), Maslow initially suggested that the hierarchy of needs contained two specific groups: growth needs and deficiency needs. In the area of deficiency needs, each need from a lower level must be achieved before an individual can move to the next level. Included in the deficiency needs are psychological needs, safety needs, belongingness and love needs, and esteem needs. Originally, Maslow identified only one growth need labeled as self-actualization. Later, Maslow added two lower-level growth needs preceding self-actualization. Those preliminary growth needs were cognitive and aesthetic needs. The last two growth needs suggested by Maslow were self-actualization and self-transcendence. When achieved, these last two growth needs imply that an individual is self-fulfilled and has realized his or her potential and has "connect[ed] to something beyond the ego." (Huitt, p. 1). Maslow's hierarchy of needs as reflected in his motivation theory and updated by Huitt is illustrated in Figure 1.



*Figure 1.* Maslow's Hierarchy of Needs

According to Owens (2001), Maslow separated his needs into two distinct areas. The first four needs were labeled “deficiency needs” because (a) their deficiency motivates people to meet them and (b) until the deficiencies are met, people find it difficult to respond to a higher-order need” (p. 354).

Maslow (1970) suggested the use of the term “prepotency” to describe the fact that lower needs must be met before an individual is motivated to seek the satisfying of a higher need.

According to Maslow (1970):

Our needs usually emerge only when more prepotent needs have been gratified. Thus, gratification has an important role in motivation theory. Apart from this, however, needs cease to place an active determining or organizing role as soon as they are gratified. (p. 57)

As Maslow (1954) discussed the idea of “prepotency,” he suggested that individuals may move between different need levels based on an individual's lack of satisfaction with a particular

need. For example, Maslow (1954) postulated, “Gratification becomes as important a concept as deprivation in motivation theory, for it releases the organism from the domination of a relatively more physiological need, permitting thereby the emergence of other more social goals” (p. 84). However, if the need arises again, the individual may return to a lower level need until the need is satisfied. Maslow explained:

They [physiological needs] now exist only in a potential fashion in the sense that they may emerge again to dominate the organism if they are thwarted. But a want that is satisfied is no longer a want. The organism is dominated and its behavior organized only by unsatisfied needs. (p. 84).

Moreover, Maslow (1954) suggested that the needs provide their own order based on “the principle of relative potency” (p. 146). Maslow (1954) further explained:

Thus the safety need is stronger than the love need, because it dominates the organism in various demonstrable ways when both needs are frustrated. In this sense, the physiological needs (which are themselves ordered in a subhierarchy) are stronger than the love needs, which in turn are stronger than the esteem needs, which are stronger than those idiosyncratic needs we have called the need for self-actualization. (p. 146)

The needs located near the top of the hierarchy were identified as growth needs and were considered higher-order needs that were never fully satisfied. Owens (2001) provided the following example:

As one learns more and develops aesthetic appreciation, the need for growth is not met; rather, it expands, the music aficionado never wearies of fine music but studies more, collects recordings, and continues attending concerts, always striving to achieve greater depth and scope of understanding and new levels of appreciation. Civil War buffs may not satisfy their curiosity by reading a book and visiting a battlefield or two: they may soon be involved to the extent of using their weekends and vacation time to attend seminars, travel to historic sites, and other wise pursue their quest for knowing and understanding with increasing energy. (p. 354)

Even Maslow (1968) acknowledged that the search for self-actualization was an ongoing process. He stated that his studies of self-actualization had been conducted mainly with older individuals and the search for self-actualization “tends to be seen as an ultimate or final state of affairs, a far goal, rather than a dynamic process, active throughout life” (p. 26). However, Maslow (1968) defined growth as “the various processes that bring the person toward ultimate

self-actualization; then, this conforms better with the observed fact that it [self-actualization] is going on *all* the time in the life history” (p. 26).

Inherent in the hierarchy was the idea that people are motivated by the desire to achieve self-actualization. This is defined as a level of functioning where an individual is employing his or her full potential, talents, and capacities (Hockenbury & Hockenbury, 2003). According to Hockenbury and Hockenbury, Maslow suggested that certain individuals would reach self-actualization during their lifetime. However, there will be many individuals, although they will attempt to, who will never reach self-actualization. As noted by Hockenbury and Hockenbury, Maslow studied the lives of individuals such as Albert Einstein, Eleanor Roosevelt, and Thomas Jefferson and determined that those individuals reached self-actualization.

Owens (2001) reported that Lyman Porter modified Maslow’s motivation theory for application in organizations. Porter adapted the hierarchy by adding one more level, that of *autonomy*. According to Owens, Porter suggested that the idea of autonomy refers to:

The individual’s need to participate in making decisions that affect him or her, to exert influence in controlling the work situation, to have a voice in setting job-related goals, and to have authority to make decisions and latitude to work independently. (p. 356)

As reported by Owens (2001), Porter designed several research studies to measure certain characteristics regarding managers including, "(a) to what extent the need characteristic . . . *was being met* by the manager’s job and (b) to what extent the manager thought the job *should* meet the need characteristic" (p. 356).

Steers and Porter (1983) reported that implications for managerial actions became obvious when one considered the need hierarchy concept. According to Steers and Porter, managers were responsible for developing "proper climate," an environment where employees could possibly grow to their “fullest potential” (p. 32). Suggestions for creating this proper climate included an increase in the number of opportunities afforded for more variety, greater autonomy, and an increase in responsibility to motivate employees to work toward higher-order need satisfaction. Steers and Porter reported, “Failure to provide such a climate would

theoretically increase employee frustration and could result in poorer performance, lower job satisfaction, and increased withdrawal for the organization” (p. 32).

Kiel (1999) suggested that even though Maslow’s hierarchy of needs theory was developed over 50 years ago and the business world has significantly changed, Maslow’s theory is applicable today with some modifications. Kiel recommended that the “shape” of Maslow’s theory (as presented in a closed triangle, see Figure 1) should be modified to an open triangle model. This suggestion was based on Maslow’s idea of self-actualization--an ongoing process of becoming. Kiel proposed, “If self actualization does not end, then why is the triangle closed? . . . The ‘modernized’ hierarchy of needs can be represented as an 'Open Triangle' Model” (p. 167).

According to Kiel (1999), as the workplace becomes an environment where employees can move toward self-actualization, the open triangle model reflects the idea that “There is no end to one’s potential--the process of development does not end” (p. 167). In addition, the open triangle model is a description of today’s trends in employment as described in Kiel's prediction:

College graduates in the 1990s will average several career tracks and multiple employments. The 1940s trend of working for the same company and collecting a pension after a lifetime of service is not the reality for 1990s. The open triangle mirrors reality of what is occurring in the 1990s business environment. The open triangle depicts lifelong learning, the acceptance of change, and the importance that self-actualization evolves. (p. 167)

#### *Frederick Herzberg’s Two-Factor Theory*

A second theory based on the humanistic idea of motivation as developed by Frederick Herzberg, indicated that motivation contained dual components. According to Owens (2001), “Perhaps no other theory of motivation at work has been more extensively researched and argued about than this [Herzberg’s theory], and in all likelihood none has been as widely applied to complex organizations” (p.359).

Dowling (1978) reported that Herzberg was ranked among the "top five best known behavioral scientists” by the Conference Board of American Management Associations” and he

[Herzberg] “developed a theory of human motivation that is simple and all-encompassing. The theory reflects the intuitive judgment of many managers who are incapable of articulating it formally” (p. 36).

Frederick Herzberg, a clinical psychologist, was extremely interested in mental health issues because he espoused the idea that mental health concerns were the core issues of the present-day era. This concept was at the center of his making a trip to a liberated concentration camp in Dachau. After his return, Herzberg was employed by the U.S. Public Health Service. His motivation-hygiene theory first appeared for publication in 1959 (“Frederick Herzberg: The Hygiene-Motivation Theory,” 1999).

The theory was developed based on research conducted using 200 accountants and engineers from Pittsburgh. Using an interview technique identified as semistructured, each participant was asked to describe a time when he or she felt bad or good about his or her job. The interviewer then asked a series of general questions and included additional questions as the interviewer saw fit (Behling, Labovitz, & Kosmo, 1968).

Herzberg determined that individuals actually have two distinct sets of needs. He identified those needs as: (a) lower level needs as an animal to avoid pain and deprivation and (b) higher level needs as a human being to grow psychologically (“Frederick Herzberg: The Hygiene-Motivation Theory,” 1999).

Dowling (1978) conducted an interview with Herzberg and one of the areas discussed was Herzberg’s early research and his use of the two questions: “What makes you happy on the job?” and “What makes you unhappy on the job?” (p. 39). Herzberg responded that he “had” to ask those two questions and that through his research, he had been able to verify that what made people happy at work and what made them unhappy were not the same things. Herzberg reported that he had discovered “factors that make people happy all are related to what people did: the job content . . . what made people unhappy was related to the situation in which they did their job” (p. 39).



In the interview with Dowling (1978), Herzberg discussed a concept that he developed out of his early research. According to Dowling, Herzberg reported:

Research and experience suggested what makes people unhappy is pain from the environment. We have this in common with all animals. We're all trying to adjust to the environment--to avoid pain . . . I developed the Adam and Abraham concept, the two natures of man. As Adam, he is an animal, and as an animal he tries to avoid pain from the environment as all animals do. As Abraham, he is a human being, and as a human being he is not the opposite of an animal, he is qualitatively different. His dynamic is to manifest his talents, and the only way he can manifest his talents is by doing things that allow him to develop his potential. (p. 40)

Herzberg translated his theory into practical applications in the workplace. He developed the phrase "job enrichment" to describe the inclusion of certain motivators into particular job designs. He determined that job enrichment should be a continuous management function that included:

1. self-scheduling,
2. control of resources,
3. accountability, and
4. undertaking specialized tasks to become expert in them. ("Frederick Herzberg: The Hygiene-Motivation Theory," 1999, n. p.)

Dowling (1978) reported that Herzberg suggested that a number of perquisites should be present for job enrichment to be successful. (Conversely, Herzberg espoused the idea that job enrichment was "a waste of time and effort" and motivation would prove to be extraneous if the job was paced by machine work). Dowling noted that Herzberg recommended four principles for success:

1. Select a job for which the investment in hygiene factors is not too big;
2. select a job in which the existing worker attitudes are poor;
3. select a job in which neglect of hygiene factors is becoming costly; and
4. select a job in which motivation will make a difference in performance. (p. 19)

Herzberg suggested that job enrichment does not rely on changing attitudes to change behaviors. Rather, Herzberg espoused the idea that one's behavior guides the development of one's attitudes. According to Dowling (1978), Herzberg reported, "Attitudes are the confirmation of your behavior . . . What determines your behavior on the job is primarily two things: what kind of talent you have and what you're permitted to do-the degree of job initiative" (pp. 47-48).

In addition, Herzberg created an acronym, KITA (Kick in the Ass) to express how certain personnel matters were managed. These practices included "wage increases, fringe benefits, and job participation that are developed as attempts to instill motivation but are only short-term solutions" ("Frederick Herzberg: The Hygiene-Motivation Theory," 1999, n. p.).

Herzberg reported that KITA was related to the "Adam" nature of man. Herzberg suggested that in order to motivate a person from the Adam or animal perspective, "you move them" by employing KITA. When an individual responds as an animal, he or she does so to avoid pain. On the other hand, when an individual, acting as a human being or as "Abraham," makes the choice to move, the individual is doing so because he or she is "motivated," i.e., "the initiative comes from within" (Dowling, 1978, p. 40).

In addition, Herzberg identified money [salary] as the largest KITA an employer possesses. Herzberg explained, "What many people do is to mistake movement for motivation" Herzberg suggested that money was not a motivating factor; rather, money was a "good mover" (as cited in Dowling, 1978, p. 43).

Herzberg explained that the practices, called hygiene factors, would not motivate employees because they only dealt with the environment or the context in which the work occurred and only addressed dissatisfaction. Instead, employees also needed growth factors or motivators that related to what a person does at work, rather than to the context in which it is done. Herzberg explained that the two sets of factors were separate and distinct because they

were concerned with two different sets of needs--they were not opposites (“Frederick Herzberg: The Hygiene-Motivation Theory,” 1999).

Herzberg identified motivators as having a more long-term impact and a more positive one than hygiene factors. As an example, Herzberg suggested, “The hygiene factors are always short term, like the length of time you’re not dissatisfied with your salary. It takes about two weeks for the effects of a raise to wear off” (Dowling, 1978, p. 41). Herzberg suggested that with hygiene factors “you need to provide more and more of both to get less and less effect” (p.43).

Herzberg discussed the difference between hygiene and motivator factors. According to Dowling (1978), Herzberg reported:

The hygiene factors go back to zero. No matter how many times you have told your wife you love her, if you fail to tell her you love her, she says, “You never tell me you love me.” The hygiene factors are all subject to the “what have you done for me lately” syndrome . . . If you get a \$4,000 increase in salary and the next year they give you a \$2,000 increase in salary, psychologically you have taken a \$2,000 cut. By contrast, the motivators are long term and don’t go back to zero. I write a book and I achieve some growth. If I don’t write another book, I don’t get back to where I was before. When I achieve, that achievement never disappears . . . You see, with the hygiene factors, you’ve got to have as much as, or more than, you had before to notice any difference, but with the motivators, you do not have to have as much as before to know the difference and feel the growth. (p. 41)

Another distinction between hygiene and motivator factors was suggested by Herzberg. He reported that a strong motivator is the idea of doing something because it is “meaningful” to an individual. This idea translates into an individual being motivated to do something because the reward is intrinsic. Herzberg identified this intrinsic reward as “the personal satisfaction [you receive] in what you do” (as cited in Dowling, 1978, p. 44). According to Herzberg’s theory, “Tasks that induce growth will inevitably lead to heightened motivation and improved performance” (Dowling, p. 44).

A study that connected Herzberg’s roots in psychology with employer-employee relationships was published by Mumford (1995). Mumford, whose study involved the

examination of five types of contracts, analyzed these contracts to determine whether benefits were greater for managers and trade unions or the employees. Mumford reported that out of the five contracts reviewed including the knowledge contract, the psychological contract, the value contract, the efficiency contract, and the work structure contract, the psychological contract was where the "divergence between employee needs and company needs has been greatest" (p. 60). Mumford suggested that Herzberg's "motivators of recognition, responsibility, advancement, and a sense of achievement seem to have been removed from many jobs and work situations" (p. 60). Instead, factors such as the fear of job loss and insecurity have replaced those positive psychological factors that were notions of the decent employer of what constitutes good industrial relations. Mumford ascertained that "new concepts of empowerment, downsizing, and flexibility" have led to the decline of a "stable and secure work environment, where management acted with consistency and justice" (p. 60). Mumford added that according to Herzberg, this defeats "the primary function of any organization, whether religious, political or industrial" whose purpose should be to "implement the needs of men to enjoy a meaningful existence" (p. x).

Phelps and Waskel (1994) conducted a study that examined psychological factors focusing on specific elements found in the work environment or "work reinforcers" that appeared to be related to job satisfaction. Phelps and Waskel were particularly interested in women between the ages of 40 and 75 and their "explanatory style," a descriptive term used for the manner in which individuals habitually explain to themselves why life events occur as they do (p. 403). The authors hypothesized, "The tendency to perceive oneself as devalued and the reluctance to accept oneself as an elderly person is often accompanied by depression and lowered self-esteem, which may impact the individual's perceived level of general job satisfaction in the workplace" (p. 403).

The results of the study conducted by Phelps and Waskel (1994) indicated, "Individuals who exhibit depressive tendencies may receive less satisfaction from their jobs in areas related to

ability utilization, activity, and creativity” (p. 404). These were areas identified as intrinsic factors by Herzberg. Although Phelps and Waskel used Herzberg’s ideas related to intrinsic factors to identify elements of job satisfaction, the authors suggested that there was a deficit in Herzberg’s research. According to Phelps and Waskel, the deficit was related to Herzberg’s failure to address the impact of individual personality needs on levels of job satisfaction. Several researchers have used Herzberg’s two-factor theory to explore such issues as the value of work or work values, the importance of work goals, and stress relief (Jones, 1997; Knoop, 1994a, 1994b; Rantz et al., 1996).

Knoop (1994a) conducted a study with 607 elementary school teachers and administrators from nine school districts in southern Ontario. He was interested in which work values provided the most relief from stress. Knoop (1994a) hypothesized:

1. Intrinsic work values should have an inverse relationship with stress; the more intrinsic values the job provides--such as achievement, recognition, the value of the work itself, and responsibility--the less stress individuals should experience.
2. Because extrinsic factors--such as working conditions, security, and benefits--at best lead to an absence of dissatisfaction, they should not lead to stress reduction. (p. 829)

The results indicated, according to a Pearson correlation, a negative correlation between intrinsic values and stress. Mixed results for extrinsic values were ascertained. Benefits and convenient working hours showed "no significant correlations with physical stress or emotional stress" (Knoop, 1994a, p. 830). Job security and working conditions did produce a significant but not meaningful correlation. Because of these results, the second hypothesis was only somewhat supported. According to Knoop (1994a), “The more these educators perceived themselves to be experiencing job aspects they valued, the less they considered themselves to be under stress” (p. 830). Of significance to the topic of motivation is the results from this study suggested the values that Herzberg, Mausner, and Snyderman called "motivators and satisfiers" were also stress relievers (Knoop, 1994a, p. 831).

In a second study conducted by Knoop (1994b), 386 subjects from secondary schools located in a metropolitan region of Canada participated in a study exploring five areas of job satisfaction and 16 work values. Regression analyses were used to test Herzberg's two-factor theory in identifying the top predictors for the work values and the dimensions of job satisfaction. According to Knoop (1994b):

The results support and extend Herzberg's theory. Not only did the variables Herzberg termed satisfiers—achievement, recognition, the work itself, and responsibility—load clearly on the intrinsic dimension of job satisfaction, but the results also suggest other values that may contribute to satisfaction: doing meaningful work, having influence over work, being able to use one's abilities and knowledge, having independence in doing one's work, contributing to society, receiving esteem from others, gaining job status, and having influence and pride in the organization. (p. 686)

Jones (1997) also used research with public school educators to test elements of Herzberg's theory. Out of a possible 1,176 questionnaires, 405 were returned; this was equivalent to a 34.4% response rate. Herzberg's idea of participatory decision making as an element of increasing staff morale was explored by Jones. The results showed, "A significant positive correlation was found between both individual and school-wide teacher participation in site-based management (SBM) decision making and teacher morale" (p. 78). However, a number of respondents indicated they would be more satisfied with their jobs if they could be more involved in curriculum and instruction. According to Owens (2001), "The Herzberg theory has been tested numerous times in school situations--and in this organizational setting, at least--appears to be well supported" (p. 362).

Herzberg's theory has been applied to a number of studies in the latter part of the 20<sup>th</sup> century. Rantz et al. (1996) used Herzberg's findings to compare and contrast data from a qualitative research project. Their project involved 38 managers and staff members from a variety of public and private work settings including academic and healthcare sectors. Key concepts were taken from Herzberg's original work involving "job experiences that were positive and negative and the meaning of money" (Rantz et al., p. 32).

Rantz et al. (1996) reported a number of likenesses to Herzberg's findings with a few exceptions. As with Herzberg's earlier studies, the authors found that recognition, the work itself, and responsibility continued to be frequently and positively cited by employees, adding that these factors "continue to be basic satisfiers (motivators) for employees" (p. 34). However, Rantz et al. cited an exception that was a significant change from Herzberg's earlier work: Interpersonal-relations that ranked as number seven as a hygiene factor in Herzberg's work had shifted its position and was listed as first among motivating factors. In addition, achievement had dropped from 1st place to 6th place and advancement moved from 5th in Herzberg's work to 12th in the Rantz et al. study.

Rantz et al. (1996) concluded their study by suggesting, "There are exciting opportunities for job redesign within organizations using motivating factors that are important to employees of the 1990s" (p. 37). At the same time, "One can take actions to facilitate one's own personal perception of job satisfaction and motivation [that] can help one feel a sense of control" (p. 37).

Maidani (1991) also used Herzberg's original research to investigate job satisfaction among private- and public-sector employees. This study involved 486 employees from one private organization and a local government agency located in Florida. Two instruments were used to measure job satisfaction based on job content (motivators) or job context (hygiene) factors. Maidani indicated that a majority of satisfied employees was found in the public sector. However, motivators were sources of satisfaction for both the public- and private-sector employees. The public-sector employees placed a higher value on the hygiene factors. Hygiene factors tested as sources of satisfaction rather than dissatisfaction for both public- and private-sector employees. This was in opposition to Herzberg's findings that concluded that hygiene factors were sources of "dissatisfaction rather than satisfaction" (Maidani, p. 443).

In an investigation of job satisfaction related to health care occupations, Pagano (1993) used Herzberg's motivation-hygiene theory to discuss the importance of assessing job satisfaction among physicians. Pagano indicated that more and more physicians were becoming

salaried employees of corporations, HMOs, specialty groups, and other organizations; therefore, “Health care organizations must sustain job satisfaction among this group to achieve continuity and stability, as well as high productivity and patient satisfaction” (p. 39). Pagano reviewed the use of a number of instruments employed to study job satisfaction for physicians. Pagano’s conclusion, however, was, “When this ‘motivation-hygiene’ theory [Herzberg’s theory] is applied to health care organizations, one begins to have a clearer picture of what are satisfiers and dissatisfiers for these providers” (p. 40).

In an unrelated study also focusing on healthcare, Dwore et al. (1997) conducted a review of research studies of managers from Utah hospitals that applied Herzberg’s theory to identify and assess factors that lead to dissatisfaction and satisfaction. One specialized area addressed in their healthcare study included 34 individuals who aspired to be CEOs. Of the respondents, 25 listed motivators including “ability to help create a vision and implement it” and “ability to impact positive changes” (p. 22) as being major advantages to a CEO in the healthcare business. Disadvantages linked to being a CEO were money, stress, and pressure to perform. This finding reflected Herzberg’s idea of hygiene or maintenance factors. Dwore et al. concluded that data from the Utah study showed, “Respondents appear driven by both Herzberg’s motivation and maintenance factors” (p. 22).

According to the Dwore et al. (1997) study in Utah, 85% of those who responded reported overall satisfaction with their jobs and women in the survey reported significantly greater satisfaction with their jobs than did men. According to Dwore et al., “Hospitals that satisfy and motivate managers and their subordinates to meet or exceed performance expectations have a competitive advantage over those that do not” (p. 14).

Dwore et al. (1997) included a review of a study involving psychiatric hospital and acute care CEOs. Those surveyed listed career negatives that included:

1. stress/burnout,
2. personal/job uncertainty,



3. regulations/controls,
4. lack of direction in industry,
5. financial pressures,
6. compensation,
7. industrial uncertainty,
8. demands/scrutiny, and
9. long hours. (p. 15)

Dwore et al. reported that a majority of the negatives was associated with dissatisfiers or work context based on Herzberg's maintenance or hygiene factors that, according to Herzberg, were "factors related to job context and are controlled by employers and managers. The absence of these factors leads to dissatisfaction; their presence to no dissatisfaction (rather than satisfaction)" (p. 15).

Bednar (2003) reported on the need to examine job satisfaction in child welfare systems to investigate factors that influence a worker's decision to leave a job or stay as well as organizational climate factors that have been linked to job satisfaction, consumer satisfaction, and client outcomes. Using Herzberg's theory, including the factors that produce job satisfaction as a model, Bednar reviewed a number of studies. In one such study, 23 caseworkers from six different agencies were interviewed. A sense of mission, good supervision, a perceived fit for the job, and "a sense of personal and professional investment in child welfare" (p. 9) were identified as being critical for caseworkers who chose to stay on the job (examples of Herzberg's motivation and hygiene factors).

Harpaz (1990) used Herzberg's research for comparison in international studies. Data gathered from a multinational study of the importance attributed to work goals were analyzed by Harpaz. Elements such as incentive, choices, work needs, job satisfaction, and work values were addressed in this study. Participants ( $N = 8,192$ ) from a number of countries including the United States, West Germany, Japan, Israel, and Belgium completed questionnaires that

contained items relating to 11 of the 14 job facets related to work goals as identified by Herzberg. According to Harpaz, the data gathered by Herzberg showed a particular ranking based on the findings of 16 studies including the 14 separate job facets. The data gathered by Harpaz established “interesting work” as the facet ranked most often as number one. This same ranking was documented by Herzberg. According to Harpaz, “With only minor exceptions, this facet [interesting work] was ranked first--the most important work goal--at every organizational level in all participating countries. Our multinational sample compares with findings of earlier studies such as those by Herzberg” (p. 79).

The importance placed on interesting work was identified by Harpaz (1990) as an intrinsic factor, or, what Harpaz called “an expressive orientation” (p. 81). Harpaz related this expressive orientation to Herzberg’s motivation factors. Harpaz suggested, “Organizations may influence the behavior of their employees by identifying and appropriately managing their important work goals. In turn, desirable work outcomes, from the perspective of the organization, may induce and reinforce individuals’ motivational behavior” (p. 81).

Herzberg’s theory has also been applied to research in higher education. Iiacqua et al. (1995) conducted a study using the responses of 83 faculty members (out of a possible 137) from a small private business college. According to Iiacqua et al., “The purpose of this study is to test the validity of the two-factor hypothesis [Herzberg’s theory] in higher education” (p. 52). An interesting idea emerged from this study. Iiacqua et al. reported, “The results seem to confirm that Herzberg’s hypothesis is valid” (p. 57). However, the researchers also identified a neutral variable that they referred to as “the administration” (p. 52). According to Iiacqua et al., both job satisfaction and job dissatisfaction were influenced by this neutral variable.

Tack and Patitu (1992) prepared a report focused on the elements needed to insure job satisfaction to draw individuals to faculty positions at institutes of higher education. Tack and Patitu suggested that a shortage of qualified faculty members might exist by the year 2000 because of numerous vacancies. Of primary interest to Tack and Patitu was the need to take

whatever action necessary to “ensure that the faculty position is attractive to women and minorities alike” while paying particular attention to elements of job satisfaction and dissatisfaction (p. iii).

Tack and Patitu (1992) referenced Herzberg’s theory as “the most widely cited and accepted theory” regarding job satisfaction. The authors recommended that individuals who work in higher education “must be aware of the factors leading to job dissatisfaction among faculty and then try to eliminate them, as well as enhance the factors that motivate faculty to work at peak levels of effectiveness and efficiency” (p. 6). Elements linked to Herzberg’s idea of job dissatisfaction and hygiene factors were reported by Tack and Patitu as being supervision, working conditions, salary, tenure, and interpersonal relationships. The authors suggested, “If college and university officials and board members do not address the factors that create dissatisfaction among women and minority faculty, women and minorities will seek satisfaction elsewhere--at other institutions, in other occupations, or in other types of organizations” (p. 19).

Research in both two- and four-year colleges and universities examining elements of both gender and job satisfaction among full and part-time faculty are fairly common (Boice, 1993; Bronstein & Farnsworth, 1998; Fedler, Counts, & Smith, 1984; Flaningam & Taylor, 1984; Olsen, Maple, & Stage, 1995; Rice, 2003; Tack & Patitu, 1992) although research examining both gender and job satisfaction among senior administrators in the community college setting is limited. A more recent study examining job satisfaction and also considering gender differences was conducted by Rice in 2003. This study involved the used of Herzberg’s two-factor theory as the theoretical basis for a study of job satisfaction among department chairpersons in the university system in the state of Connecticut. Data were gathered using the Job Descriptive Index (JDI), the Job in General (JIG), and the Need Satisfaction Questionnaire (NSQ). The only demographic factor requested was gender. Data for this study were analyzed using mixed factorials, post hoc analyses, and descriptive statistics. A between subjects

Analysis of Variance (ANOVA) was used to determine if there were significant differences in gender regarding the overall satisfaction score. One hundred ten departmental chairpersons were provided with survey instruments and 60 surveys were returned for a response rate of 55%.

The findings of the study conducted by Rice (2003) indicated:

87% of department chairpersons reported satisfaction with their job. The hygiene determinants of authority, security, methods and procedures and developing close friendships, as measured by the NSQ, were not equally perceived as satisfying and may have reflected a gender difference. Two of the three hygiene dimensions (supervision, people at work) from the JDI, showed 80% satisfaction whether male or female. Unlike the hygiene items, the motivational dimensions did not reveal a significant gender difference. The need satisfaction results indicated that male and female chairpersons only differed significantly on the dimension of developing close friendships. Female chairpersons attributed more importance to developing close friendships than male chairpersons. (n.p.)

Geiger (2002) examined job satisfaction among faculty members at small, medium, and large community colleges in Florida using Herzberg's motivation-hygiene (two-factor theory).

The purpose of the study was three-fold to:

1. determine job satisfaction level of full-time Florida community college faculty using 10 factors based on Herzberg's motivation-hygiene theory;
2. determine relative differences in job satisfaction of full-time Florida community college faculty at small, medium, and large institutions; and
3. investigate relationships among demographic variables, age, ethnicity and gender, and job satisfaction of community college faculty. (p. 1)

Geiger (2002) reported that full-time faculty in Florida's community colleges reported being overall "moderately satisfied" with their jobs. Faculty reported the most job satisfaction with work and reported the least level of job satisfaction with salary. Geiger concluded that his study's findings "provide[d] partial support for Herzberg's motivation-hygiene theory. Geiger also noted, "No significant differences in job satisfaction were found among faculty at small,

medium, and large institutions . . . No significant differences in job satisfaction were found between minorities (African American or Hispanic) and Whites” (p. 1). One particular note of interest from Geiger’s study was, “Older or female faculty expressed less hygiene satisfaction than did younger or male counterparts” (p. 1).

Herzberg’s two-factor theory has also been used to assess job satisfaction with other professionals who work in the higher education setting. One such study by Zhang, DeMichele, and Connaughton (2004) assessed job satisfaction among mid-level campus recreation program administrators. All participants were affiliated with the National Intramural Recreational Sports Association (NIRSA). The researchers developed and tested a questionnaire to assess:

- 1) dimensions of job satisfaction,
- 2) current job satisfaction level, and
- 3) relationship between job satisfaction and institutional characteristics. (p. 1)

Zhang et al. (2004) found that, consistent with Herzberg’s theory, “Certain job content elements are dissatisfiers (such as interpersonal relationship and failure to achieve) and diminish the motivation to work hard in related aspects” (p. 12). Overall, participants reported a high level of job satisfaction. However, a number of respondents indicated a low level of satisfaction in “organization work environment” while reporting high levels of satisfaction with the individual work environment. Zhang et al. referred to Herzberg’s theory addressing the hygiene factors associated with the work environment and recommended, “The institution may have to make necessary improvement in areas such as organizational communication, professional development, and promotion and advancement in order to meet the needs and expectations of the mid-level campus recreation program administrators” (p. 12).

### *A Critical Look at Herzberg's Two-Factor Theory*

Owens (2001) reported that although Herzberg's two-factor theory had been applied to organizational management, primarily in the United States' industrial and business arenas, and had been widely accepted, four major criticisms had been documented. These criticisms included:

1. Herzberg's basic research methods tended to foreshadow the responses he got. When things went well and people felt satisfied, they tended to take the credit for it; but, when things went badly on the job and the respondents were not satisfied, they tended to project the fault onto other people or onto management.
2. The reliability of his research methods is also open to question. The research design required a number of trained individuals to score and interpret the responses from the respondents. Obviously, there may be some differences in the way individuals do the rating.
3. No provision in the research covers the likely possibility that a person may get satisfaction from part of his or her job and not from another part.
4. The theory assumes that there is a direct relationship between effectiveness and job satisfaction; yet, the research studies only satisfaction and dissatisfaction and does not relate either of them to the effectiveness (or productivity) of the respondents. (pp. 361-362)

Owens countered the first three criticisms by indicating that Herzberg's two-factor theory was based on sound research, saying, "Herzberg's research-after exhaustive review in the literature over a period of two decades-must be accepted as representing the state of the art" (p. 362).

However, Owens suggested that the fourth criticism warranted additional scrutiny. A debate existed regarding the basis of job effectiveness and researchers who supported the human relations premise were more likely to think that satisfied workers are likely to be productive.

Herzberg espoused the idea that individuals who reported job satisfaction attained that satisfaction through the work itself, or, more precisely, that job satisfaction comes from the achievement. Owens suggested that even though a large body of research literature existed, there had been problems regarding methodology and ideological conflicts; therefore, the results remained open for debate.

As early as the 1960s, researchers were testing Herzberg's theory in an effort to either replicate his results or refute them. Behling et al. (1968) reviewed a number of studies that sought to either confirm or counter Herzberg's work. One study reviewed by Behling et al. was conducted by Ewen in 1964 and included 1,021 insurance agents using an attitude scale containing 58 items. According to Behlinger et al., the results from Ewen's research indicated that hygiene and motivation factors varied in their relation to job satisfaction. These results were unlike Herzberg's who reported these factors were constant in their relationship to satisfaction.

Behling et al. (1968) reviewed 15 additional studies that produced conflicting results to Herzberg's work with the two-factor theory. However, Behling et al. reported that the only consistent pattern present in the studies reviewed was a negative one--none of the studies in support of a "uniscalar" [as opposed to Herzberg's dual approach] explanation used Herzberg's critical-incident technique [for data gathering]. With few exceptions, although the measuring techniques varied, they used some form of "structured, scalar device" (p. 105).

Behling et al. (1968) concluded that there was no evidence to support the idea that only one attitude regarding an employee's work existed. Rather, they determined that researchers will be faced with a variety of aspects related to one's work and that different techniques for gathering data will address these different areas. Behling et al. reported:

The argument between the pro and anti-Herzberg factions itself is evidence in support of this idea. The conflicting results obtained with semistructured critical-incident techniques and more structured scalar approaches provide further support of this idea . . . The assumption underlying research, the comments made about the nature of job satisfaction and, most importantly, the research results obtained, reveal little consistency from author to author or from study to study. They are talking about different things, measuring them in different ways, and obtaining dissimilar results. (pp. 107-108)

Dowling (1978) criticized what he called "Herzberg's monolithic view of human nature" (p. 37). Dowling suggested that Herzberg chose to disregard the multiplicity of human nature and the idea that employees have a diversity of goals and needs and not all employees "will respond to the motivators that Herzberg is convinced are the sole bases of true job satisfaction" (p. 37).

Herzberg (1966) acknowledged that although his original study (published in *The Motivation to Work*) regarding job attitudes had received acceptance in many circles, some of the criticisms he received were justified. Herzberg wrote:

One of the most pertinent of the criticisms concerns the overgeneralization of the theory because the evidence was based on a restricted sample of accountants and engineers. Another related and valid criticism centers on the very nature of psychological investigations. Because of the unreliability of many of its findings, psychological research is more suspect than research in the hard sciences . . . More than in any other science, replication of research is a must in psychology, in order to substantiate findings. (p. 92)

A final criticism came from the research conducted by Crow and Hartman (1995). They argued that "dissatisfies" or, according to Herzberg's term, "maintenance factors" should be more closely examined. According to Crow and Hartman, Herzberg espoused the idea that "Organizations could influence both factors [maintenance and motivators] and that it was to their economic advantage to do so" (p. 36). Crow and Hartman advocated for organizations attempting to remove causes of job dissatisfaction and place more responsibility for job satisfaction with the employees.

However, Herzberg (1968), in his own words, espoused support for attending to "motivators." Herzberg wrote:

The very nature of motivators, as opposed to hygiene [maintenance] factors, is that they have a much longer-term effect on employees' attitudes. Perhaps the job will have to be enriched again, but this will not occur as frequently as the need for hygiene. (p. 10)

Herzberg's (1966) ideas regarding the two-factor theory or "motivation-maintenance theory" have received much attention during the last several decades. His research has been repeated and used as a model for several studies and has been applied to a variety of work settings. He developed the phrase "job enrichment" to express the inclusion of motivators to enrich or enhance job design. Herzberg (1966) advocated:

Job enrichment will not be a one-time proposition, but a continuous management function . . . Not all jobs can be enriched, nor do all jobs need to be enriched. If only a small percentage of the time and money that is now devoted to hygiene, however, were given to job enrichment efforts, the return in human satisfaction and economic gain



would be one of the largest dividends that industry and society have ever reaped through their efforts at better personnel management. The argument for job enrichment can be summed up quite simply: if you have employees on a job, use them. If you cannot use them on the job, get rid of them, either via automation or by selecting someone with lesser ability. If you can't use them and you can't get rid of them, you will have a motivation problem. (p. 10)

### *Summary*

Although motivational theories abound, two main perspectives have emerged as dominant theories. These theories, grounded in the research of the behavioral psychologists, are based on extrinsic influence and the cognitive and humanistic perspectives that are focused on intrinsic ideas.

Although similarities exist between Maslow's hierarchy of needs theory and Herzberg's two-factor theory, one main difference has emerged. According to Owens (2001), "Maslow thought of every need as a potential motivator with the range of human needs in a prepotent hierarchical order whereas Herzberg argued that only the higher-order needs are truly motivating" (p. 363). Another less obvious difference is the fact that Maslow's theory addresses an individual's existence both at work and away from work. Herzberg's theory specifically addresses the work environment.

## CHAPTER 3

### METHODS AND PROCEDURES

#### *Introduction*

This chapter details the procedures and methodology used in this study to determine if there were any gender differences regarding motivation of senior administrators in Virginia's community colleges using Herzberg's two-factor theory.

The chapter is structured to include the following sections: research design, population, instrumentation and data collection, data analysis, and summary.

#### *Research Design*

This is a quantitative study designed to assess factors relating to job satisfaction and dissatisfaction as reported by senior administrators in Virginia's community colleges and to determine if there are any gender differences in motivation between male and female senior administrators. Data for this study came from the use of two instruments. The first instrument, the Job Descriptive Index (JDI), was developed in 1969 by Smith, Kendall, and Hulin at Bowling Green State University and assesses five facets of job satisfaction (Kihm, Smith, & Irwin, 1997). A second instrument packaged with the JDI, the Job in General Scale (JIG), assesses overall job satisfaction (Job Descriptive Index, 2005.) Descriptive and inferential statistics were used to report the data, as well as *t* tests for independent samples for evaluating differences between male and female administrators.

Herzberg's (1966, 1987) two-factor theory was used as the theoretical foundation for the research. Herzberg's theory and Maslow's (1968) theory were reviewed and compared in Chapter 2. Herzberg's theory was used because the theory has been specifically applied to the workplace. In addition, Herzberg's two-factor theory "has been strongly supported by additional research carried out by a number of investigators using similar techniques . . . Herzberg's theory

has been widely influential . . . and remains a powerful explanation of motivation in the workplace” (Owens, 2001, p.363).

### *Participants*

The target participants for this study consisted of senior administrators from the Virginia Community College System. Individuals surveyed included presidents, vice-presidents for instruction, vice-presidents for enrollment management, provosts, deans of departments, academic deans, and instructional deans. A list of the names of individuals who matched the definition for “senior administrator” was developed based on information gathered from administrative assistants to the community college presidents, the presidents themselves, or the Director of Institutional Research for individual community colleges.

The Virginia Community College System, established in 1966, is comprised of 23 community colleges situated on 40 campuses including satellite facilities. According to Graham (1999):

The primary mission [of Virginia Community Colleges] includes associate in arts and sciences degrees designated to transfer to public and private senior institutions, associate in applied science degrees designed to lead directly to work, certificate and diploma programs, developmental education, continuing education including workforce development, and community services programs. (p. 431)

This mission is satisfied through continuing education, technical and /or occupational education, training opportunities for industry and community services and business, and transfer programs. According to Graham (1999), individuals who reside within the Commonwealth of Virginia are afforded “a continuing opportunity for the development and extension of their skills and knowledge through quality programs and services that are financially and geographically accessible” (p. 431). As a combined goal, The Virginia Community College System addresses the needs of both the economic regions served by the colleges and the individuals who reside in these specific regions.

Enrollment for the 2003-2004 year in the Virginia Community College System was equivalent to 92,355 full-time students and more than 46,400 students were awarded some type of financial aid equivalent to more than \$119 million (VCCS Statistical Profile, 2005). Statistically, 63% of those students enrolled in an undergraduate program in a public institution of higher education in the state of Virginia are currently enrolled in a Virginia community college including 55% of all minorities and 75% of those students who are 25 years and older (Virginia Community College System, 2005, n. p.).

### *Instrumentation*

Kinicki, Schriesheim, McKee-Ryan, and Carson (2002) reported that the JDI, developed by Smith, Kendall, and Hulin in 1969, is one of the most, if not the most, frequently used instrument to measure job satisfaction. The JDI has undergone a number of revisions with the most recent revision occurring in 1997. The five areas of job satisfaction measured by the JDI include: satisfaction with co-workers, satisfaction with the work itself, satisfaction with one's supervisor, satisfaction with opportunities for promotion, and satisfaction with pay (Kihm et al., 1997). The items relating to satisfaction with the work itself and satisfaction with opportunities for promotion relate to Herzberg's intrinsic factors or motivation factors whereas items relating to salary and supervision relate to extrinsic factors or hygiene factors (Owens, 2001).

The JDI includes 72 items (divided among 5 subscales including work on present job, opportunities for promotion, present pay, co-workers, and supervision) and the JIG includes 18. Items are coded by marking "N" (no), "Y" (yes), or "?" (cannot decide). Positively worded items are scored 3 (yes), 1 (cannot decide), and 0 (no), and negatively worded items are scored 0 (yes), 1 (cannot decide), and 3 (no) (Kinicki et al., 2002, p. 15).

The five facets of job satisfaction are scored individually, i.e., the individual facet scores are not added together. According to Balzer et al. (1997), "Summing across JDI facets does not result in an accurate measure of overall job satisfaction even though there is a fairly large general

satisfaction component common to the five JDI scales” (p. 13). The authors of the JDI made a decision to enhance the JDI by including a measure of overall job satisfaction. The result of this decision was the development of the Job in General (JIG) that is administered with the JDI. Balzer et al. reported that the JIG was “a carefully constructed measure of overall job satisfaction” (p. 13).

Each Job Descriptive Index was scored by summing the total number of points for each of the five facets and for the job in general. Total points for the opportunities for promotion and for the present pay facets (which contain only nine items each) are doubled so that each facet of the JDI and the JIG has a range of 0-54 (Balzer et al., 1997, p. 21). A copy of the Job Descriptive Index with the Job in General Scale is shown as Appendix B.

Harwell (2003), who reviewed the Job Descriptive Index and the Job in General Scale for *The Fifteenth Mental Measurements Yearbook*, noted, “The JDI has a long history in the assessment of job satisfaction literature, with initial validation of the JDI begun in 1959 and the original JDI published in 1969” (p. 491). The survey instrument was revised first in 1985 and again in 1997. Harwell reported:

*Reliability* estimates on each of the five facets in the 1997 revision were computed using the data from approximately 1,600 respondents to the JDI. Cronbach alpha coefficients ranged from .86 to .91. *Validity*. Because most of the items on the 1985 and 1997 revisions of the JDI are the same, reported validity evidence for the 1997 revision relies heavily on data collected for the earlier version. In the 1985 revision the authors used a variety of techniques for data collected for 795 employees to examine how items and facets were operating, including correlations with other measures of job satisfaction, factor analyses, and item response theory models. In general, there is strong evidence of construct validity in that the JDI has been shown to correlate with other job satisfaction scales and with various job attitudes and behaviors. (p. 491)

Harwell (2003) also reported high reliability based on a coefficient alpha of .91 and acceptable standard errors of measure for the Job in General Scale. Convergent and discriminant validities were also noted by Harwell about the JIG. The JIG has also been acknowledged as correlating with a variety of job attitudes and behaviors and with other scales used to measure job satisfaction (p. 492).

Harwell (2003) reported that the JDI and JIG are used widely as tools for measuring job satisfaction and they “have considerable empirical evidence supporting their psychometric properties” (p. 492). Harwell also listed a deficiency regarding “the kinds and frequencies of jobs represented in the sample of workers used to generate the norms” (p. 492). He concluded his review of the JID and the JIG by suggesting, “This deficiency could easily be remedied by making this information available to potential users, perhaps on the JDI and JIG website” (p. 492).

Copyrights to the Job Descriptive Index and the Job in General Scale belong to Bowling Green University in Ohio. The right to use these instruments was purchased from Bowling Green University, Bowling Green, Ohio. Sale of copyrights is managed by the Department of Psychology.

#### *Data Collection*

Initial permission to survey senior administrators in Virginia’s community colleges was sought by letter through the Office of the Chancellor of the Virginia Community College System, Dr. Glenn DuBois. A copy of this letter is included as Appendix C.

After the initial request was made to the Office of the Chancellor, a detailed research proposal was completed and mailed, along with a cover letter, to Dr. Charlie White, Interim Vice Chancellor for Academic Services and Research for the Virginia Community College. A copy of the cover letter is included as Appendix D.

Approval for the proposed study was received from Dr. Glenn DuBois, Chancellor, with the stipulation that each college president would be contacted individually to seek his or her approval to send surveys to his or her senior administrators. A copy of the approval letter from Dr. Glenn DuBois is included as Appendix E.

A letter introducing the researcher, explaining the proposed study, and notifying presidents to expect a phone call to discuss the study was sent to each of the 23 community

college presidents. A copy of the approval letter from Dr. DuBois and a sample copy of the survey instrument were enclosed in the mailing. A copy of the letter of introduction sent to each of the community college presidents is shown as Appendix F.

Each of the 23 community college presidents was contacted by phone between September 1 and October 15, 2005. Approval to send surveys to senior administrators was granted by 21 of the 23 community college presidents. One president denied the request and one president was unable to be contacted after numerous attempts.

A cover letter explaining the purpose of the study, a copy of the survey instruments, an IRB consent form, and 2 self-addressed, stamped envelopes were mailed to each senior administrator. A copy of the cover letter mailed to senior administrators is included as Appendix G. A copy of the IRB consent form is included as Appendix H.

Two weeks after the initial mailing to senior administrators a second letter was sent as both a thank you to individuals who had returned their surveys and as a reminder to those who had not. A copy of this follow up letter is included as Appendix I.

Every attempt was made to maintain confidentiality of those respondents who returned surveys. Respondents were identified by a code number included on each survey for tracking purposes. The tracking list was destroyed before analysis of data began. Respondents were not identified by name, position, or campus.

### *Data Analysis*

Data for this study were assembled from the surveys and descriptive and inferential statistics were used to analyze the information. The data were analyzed using the SPSS (11.5 version) for Microsoft Windows. The only demographical information assessed was gender. Differences between male and female administrators were evaluated using *t* tests for independent samples with an alpha level of .05. Following are a list of research questions and hypotheses explored in this study:

### *Research Questions*

1. What are the job satisfaction levels of senior administrators in Virginia's community colleges on the motivational factors for work on present job and opportunities for promotion?
2. What are the job satisfaction levels of senior administrators in Virginia's community colleges on the hygiene factors for pay, co-workers, and supervision?
3. What is the overall job satisfaction level of senior administrators in Virginia's community colleges on job in general?
4. Are there differences between male and female senior administrators in Virginia's community colleges regarding the motivational job satisfaction factors for work on present job and opportunities for promotion?
5. Are there differences between male and female senior administrators in Virginia's community colleges regarding the hygiene job satisfaction factors for pay, co-workers, and supervision?
6. Is there a difference between male and female senior administrators in Virginia's community colleges regarding overall job satisfaction for job in general?

### *Hypotheses*

For Research Questions 4 through 6, six hypotheses were developed:

- Ho<sub>1</sub>: There is no difference between male and female senior administrators and their job satisfaction with work on present job.
- Ho<sub>2</sub>: There is no difference between male and female senior administrators and their job satisfaction with opportunities for promotion.
- Ho<sub>3</sub>: There is no difference between male and female senior administrators and their job satisfaction with Pay.



- Ho<sub>4</sub>: There is no difference between male and female senior administrators and their job satisfaction with co-workers.
- Ho<sub>5</sub>: There is no difference between male and female senior administrators and their job satisfaction with supervision.
- Ho<sub>6</sub>: There is no difference between male and female senior administrators and their job satisfaction with the job in general.

### *Summary*

This chapter included a description of the study, the population, research design, instrumentation, data collection procedures, and methods of data analysis that were used for this research study. This study used a quantitative design to explore gender differences in motivation of senior administrators in Virginia's 23 community colleges. Frederick Herzberg's two-factor theory served as the theoretical foundation of this study.

## CHAPTER 4

### ANALYSIS OF THE DATA

The purpose of this study was to assess motivational and hygiene factors in senior administrators in the Virginia Community College Setting employing Frederick Herzberg's idea of job satisfaction and job dissatisfaction and to determine if there were differences between the genders with regard to motivation.

The study's population consisted of senior administrators, including presidents, provosts, vice presidents, and deans from 21 of Virginia's 23 community colleges. In the fall of 2005, survey instruments were mailed to 186 individuals identified as senior administrators at Virginia's community colleges. Out of the 21 colleges included in the study, 6 colleges had return rates of less than half the participants. Three of those colleges were located in rural areas and three were located in urban areas of Virginia. The only demographic information requested was the gender of each respondent. From this group of 186 surveys, 107 surveys were returned for a response rate of 57.5%. Out of the 79 individuals who chose not to complete surveys, 49 were male (62%) and 29 were female (37%). The gender of one nonrespondent could not be identified based on his or her name. Initial analysis of data was conducted using descriptive statistics. Differences between male and female administrators were evaluated using *t* tests for independent samples with an alpha level of .05.

Effect sizes were included with the interpretations of the tests for significance for each hypothesis. The qualitative guidelines for interpreting the effect sizes were:

Small = .01

Medium = .06

Large = .14 or larger. ("Effect Size," 2000, n. p.)

Although "norms were developed for the JDI [Job Descriptive Index] to permit direct comparison of similar groups of employees across organizations," such comparisons were not

included in this study (Balzer et al., 1997, p. 52). The information regarding norms provided by Balzer et al. did not include what type (i.e. blue collar, white collar, years of education, etc.) of managers had responded to the JDI used for norming purposes.

### *Analysis of the Research Questions*

Data for this study were assembled from the surveys and descriptive and inferential statistics were used to analyze the information. Organization for this chapter is based on the order of the research questions presented in Chapters 1 and 3.

#### *Research Question #1*

What are the job satisfaction levels of senior administrators in Virginia's community colleges on the motivational factors for work on present job and opportunities for promotion? One hundred seven participants responded to the work on present job subscale. Scores for work on present job ranged from a low of 24 to a high of 54. Scores for the 25<sup>th</sup> and 50<sup>th</sup> percentiles were 47 and 51, respectively. The mean ( $M = 48.93$ ,  $SD = 6.34$ ) indicated that senior administrators experienced a high level of job satisfaction with work on present job. The histogram for work on the present job is shown in Figure 2.

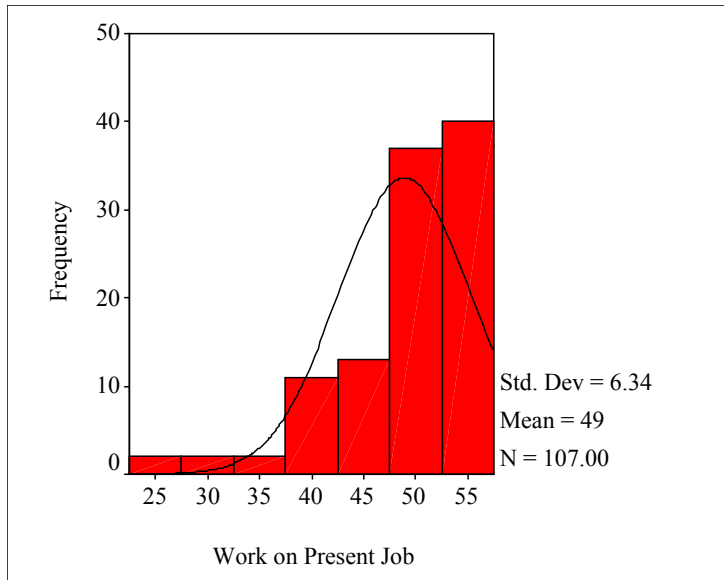


Figure 2. Histogram for Work on Present Job

*Opportunities for Promotion.* One hundred six participants responded to the scale of opportunities for promotion. The scores for opportunities for promotion ranged from 0 to 54 with scores of 12 and 23 for the 25th and 50th percentiles, respectively. The mean ( $M = 26.21$ ,  $SD = 17.12$ ) suggested that senior administrators had a relatively low level of job satisfaction with their opportunities for promotion. The histogram of the distribution of scores for opportunities for promotion is shown in Figure 3.

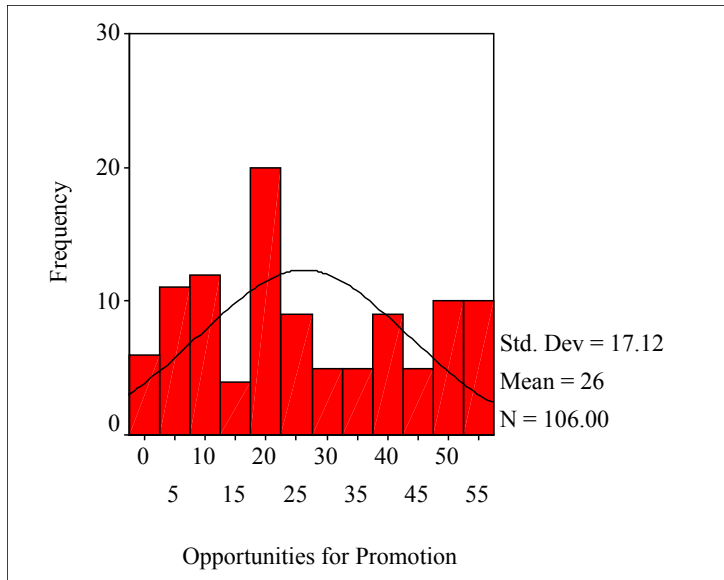


Figure 3. Histogram for Opportunities for Promotion

### Research Question #2

What are the job satisfaction levels of senior administrators in Virginia’s community colleges on the hygiene factors for pay, co-workers, and supervision? To examine the job satisfaction levels of senior administrators on hygiene factors for pay, co-workers, and supervision, means, standard deviations and the 25th and 50th percentiles were used.

*Present Pay.* One hundred five participants responded to the scale of present pay. Scores for satisfaction with present pay ranged from 6 to 54 with scores of 30 and 38 representing the 25th and 50th percentiles. The mean ( $M = 38.27$ ,  $SD = 12.70$ ) indicated that senior administrators reported only a somewhat moderate level of satisfaction with regard to present pay. Figure 4 shows the histogram of the distribution of present pay.

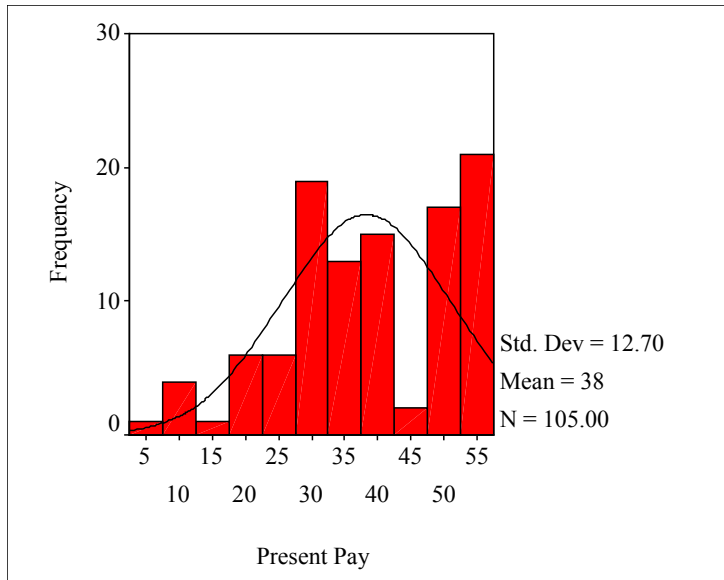


Figure 4. Histogram for Present Pay

*Co-Workers.* One hundred seven participants responded to the scale regarding co-workers. The scores ranged from a low of 19 to a high of 54 with scores of 42 and 49 for the 25th and 50th percentiles. The mean ( $M = 46.59$ ,  $SD = 7.91$ ) indicated that with regard to co-workers, senior administrators reported a high level of satisfaction. Figure 5 shows the histogram of satisfaction with co-workers.

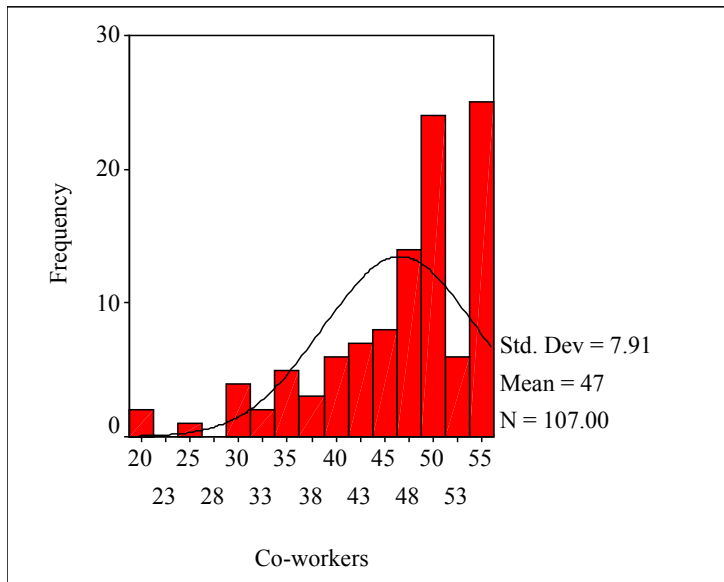


Figure 5. Histogram for Co-Workers

*Supervision.* One hundred six participants responded to the scale reporting on job satisfaction with regard to supervision. Scores for supervision ranged from 7 to 54. The 25th and 50th percentiles for supervision were 42 and 49.5, respectively. The mean ( $M = 46.10$ ,  $SD = 9.45$ ) indicated that senior administrators experienced a high level of satisfaction with current supervision. The histogram for satisfaction with supervision is shown in Figure 6.

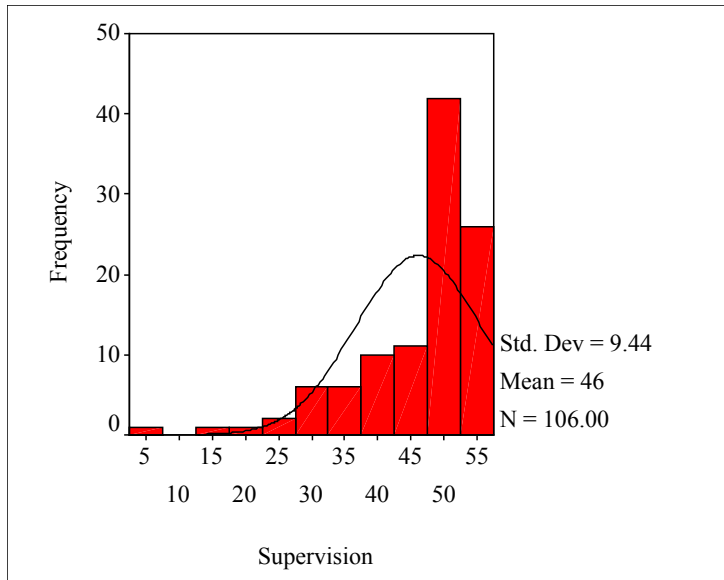


Figure 6. Histogram for Supervision

### Research Question #3

What is the overall job satisfaction level of senior administrators in Virginia’s community colleges on the job in general? To examine the overall job satisfaction levels of senior administrators on job in general, the mean, standard deviation, and the 25th and 50th percentiles were used.

*Job in General.* One hundred six participants responded to the overall Job in General Survey. Scores for satisfaction with job in general ranged from 16 to 54 with scores of 45 and 50 for the 25th and 50th percentiles. The mean ( $M = 47.68$ ,  $SD = 7.52$ ) indicated that senior administrators had a high level of satisfaction with their current jobs in general. Figure 7 shows the histogram of the distribution of scores for satisfaction with job in general.



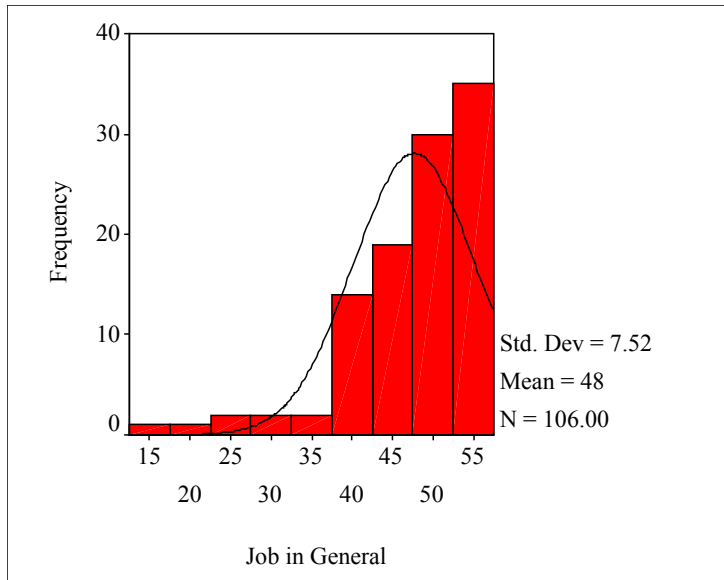


Figure 7. Histogram for Job in General

#### Research Question #4

Are there differences between male and female senior administrators in Virginia's community colleges regarding the motivational job satisfaction factors for work on present job and opportunities for promotion? Two hypotheses were developed to answer Research Question #4. The hypotheses for this question included:

- Ho<sub>1</sub>: There is no difference between male and female senior administrators and their job satisfaction with work on present job.
- Ho<sub>2</sub>: There is no difference between male and female senior administrators and their job satisfaction with opportunities for promotion.

*Work on Present Job.* An independent samples *t* test was used to determine if there was a difference between male and female senior administrators' job satisfaction for work on present job. The *t* test was not significant,  $t(105) = .302, p = .76$ ; therefore, the null hypothesis was retained. The effect size, as measured by  $\eta^2$  was small (.03). The mean for male administrators

( $M = 48.79$ ,  $SD = 6.44$ ) was almost identical to the mean for female administrators ( $M = 49.18$ ,  $SD = 6.22$ ). Figure 8 shows boxplots for job satisfaction with work on the present job for male and female administrators.

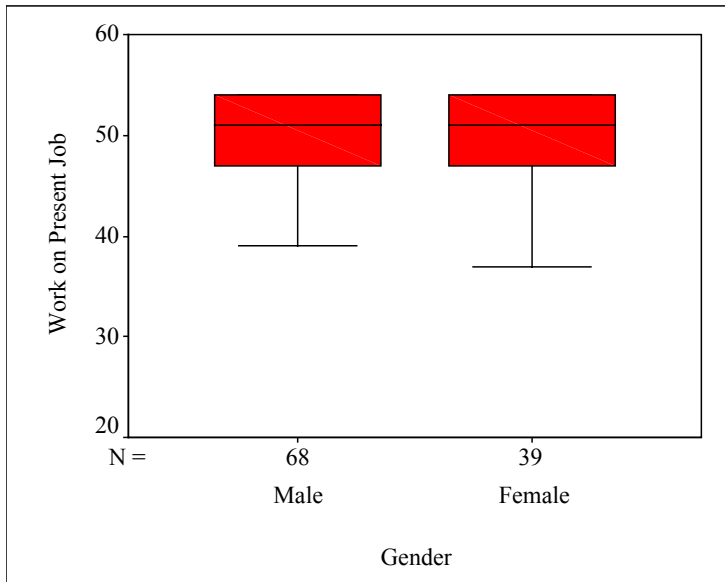


Figure 8. Boxplots for Job Satisfaction With Work on Present Job by Gender

*Opportunities for Promotion.* A  $t$  test for independent samples was used to determine if there was a difference between male and female senior administrators' job satisfaction regarding opportunities for promotion. The  $t$  test was significant,  $t(104) = 2.206$ ,  $p = .03$ . The null hypothesis was rejected. The effect size measured by  $\eta^2$  was large (.21). The mean for male senior administrators' job satisfaction with opportunities for promotion ( $M = 28.96$ ,  $SD = 16.73$ ) was almost 7.5 points higher than the mean for female administrators ( $M = 21.49$ ,  $SD = 16.94$ ). Male senior administrators reported a higher level of job satisfaction with regard to opportunities for promotion than did female administrators. Figure 9 shows boxplots for the opportunities for promotion factor by gender.

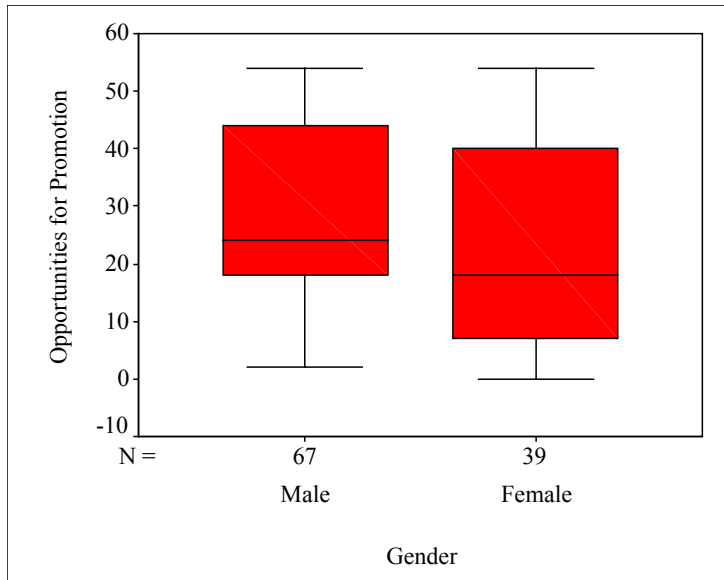


Figure 9. Boxplots for Job Satisfaction With Opportunities for Promotion by Gender

#### Research Question #5

Are there differences between male and female senior administrators in Virginia's community colleges regarding the hygiene job satisfaction factors for pay, co-workers, and supervision? Three hypotheses were developed to answer this question. The hypotheses for Research Question #5 were:

- Ho<sub>3</sub>: There is no difference between male and female senior administrators and their job satisfaction with present pay.
- Ho<sub>4</sub>: There is no difference between male and female senior administrators and their job satisfaction with co-workers.
- Ho<sub>5</sub>: There is no difference between male and female senior administrators and their job satisfaction with supervision.

*Present Pay.* A *t* test for independent samples was used to evaluate whether a difference existed between male and female senior administrators' job satisfaction related to present pay. The test was not significant,  $t(103) = .221, p = .83$ . Therefore, the null hypothesis was retained.

There is no difference between male and female administrators and their satisfaction with present pay. The effect size as measured by  $\eta^2$  was small (.02). The mean for male administrators ( $M = 38.06$ ,  $SD = 12.57$ ) was less than one point different from that of female administrators ( $M = 38.63$ ,  $SD = 13.10$ ). Figure 10 shows boxplots for job satisfaction with present pay for male and female administrators.

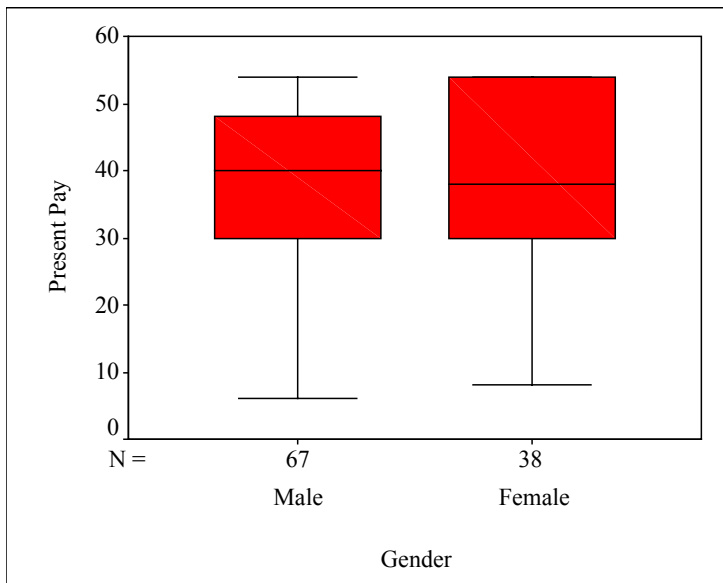


Figure 10. Boxplots for Job Satisfaction With Present Pay by Gender

*Co-Workers.* A  $t$  test for independent samples was used to evaluate whether there was a difference between male and female senior administrators' job satisfaction related to co-workers. The Levene's test for equality of variances showed there was a violation of the assumption of equal variances,  $F(105) = 4.410$ ,  $p = .04$ . Therefore, the  $t$  test that did not assume equal variances was used. The  $t$  test was significant,  $t(65) = 2.236$ ,  $p = .03$ . The null hypothesis was rejected. The effect size as measured by  $\eta^2$  was large (.23). The mean for male senior administrators' job satisfaction with co-workers ( $M = 47.94$ ,  $SD = 6.98$ ) was almost four points

higher than was the mean for female administrators ( $M = 44.23$ ,  $SD = 8.92$ ) indicating that male senior administrators reported a greater level of satisfaction with their co-workers than did female senior administrators. Figure 11 shows boxplots for the co-workers' job satisfaction factor by gender.

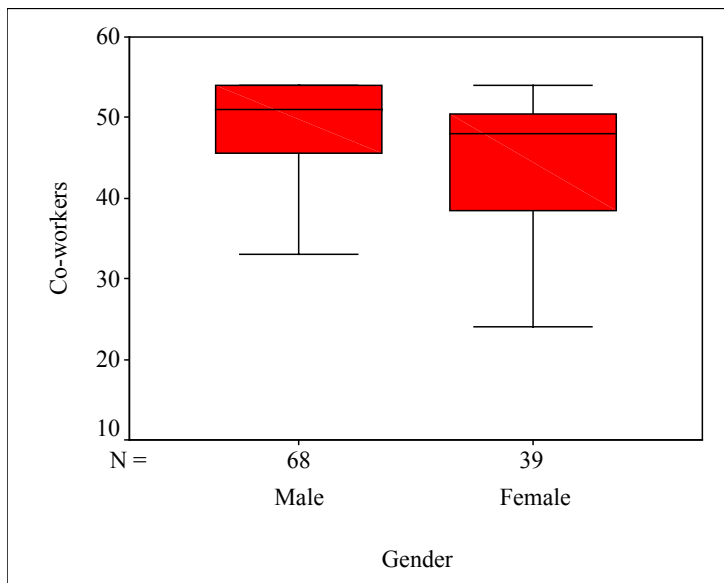


Figure 11. Boxplots for Job Satisfaction With Co-Workers by Gender

*Supervision.* An independent samples  $t$  test was used to determine if there was a difference between male and female senior administrators' job satisfaction with supervision. The  $t$  test was not significant,  $t(104) = 1.355$ ,  $p = .18$ . Therefore, the null hypothesis was retained. There was no difference between male and female senior administrators regarding their reported level of satisfaction with supervision. The effect size measured by  $\eta^2$  was moderate (.13). Whereas the  $t$  test was not significant, the mean for male administrators ( $M = 47.03$ ,  $SD = 7.91$ ) was 2.5 points higher than was the female administrators' mean ( $M = 44.45$ ,  $SD = 11.64$ ).

Figure 12 shows boxplots for job satisfaction with supervision for male and female administrators.

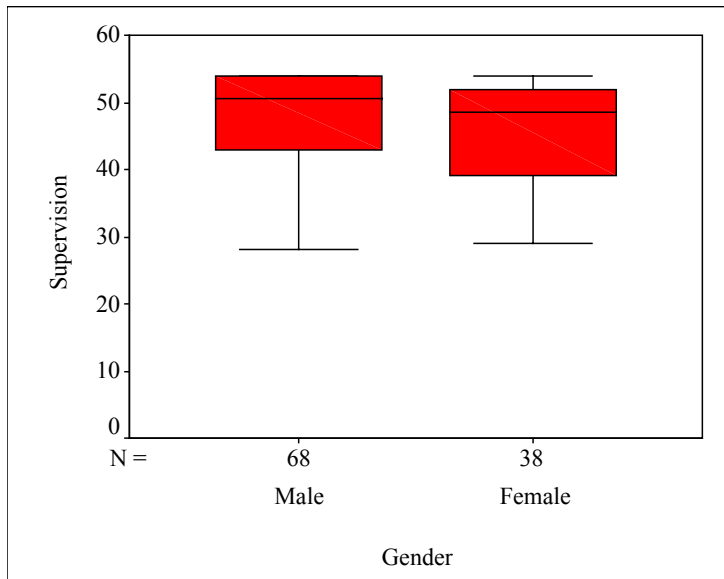


Figure 12. Boxplots for Job Satisfaction With Supervision by Gender

#### Research Question #6

Is there a difference between male and female senior administrators in Virginia's community colleges regarding overall job satisfaction for job in general? One hypothesis was developed to answer Research Question #6. The hypothesis was:

Ho<sub>6</sub>: There is no difference between male and female senior administrators and their job satisfaction with the job in general.

*Job in General.* A *t* test for independent samples was used to evaluate whether there was a difference between male and female senior administrators' job satisfaction related to job in general. The *t* test was significant,  $t(104) = 2.397, p = .02$ . The null hypothesis was rejected.

The effect size as measured by  $\eta^2$  was large (.23). The mean for male senior administrators' job satisfaction with the job in general ( $M = 48.99, SD = 6.15$ ) was almost 4 points higher than the mean for female administrators ( $M = 45.44, SD = 9.07$ ). Figure 13 shows boxplots for job satisfaction with the job in general for male and female administrators.

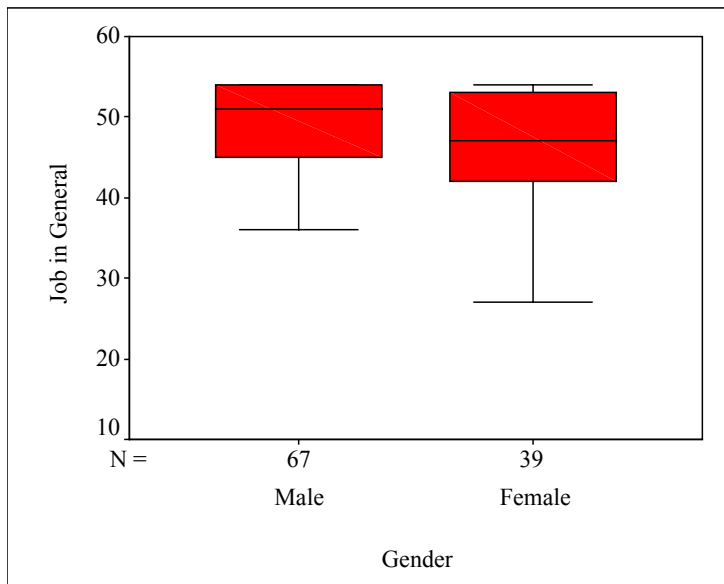


Figure 13. Boxplots for Job Satisfaction With Job in General

### Summary

Data analysis regarding information gained from surveys received from senior administrators at Virginia community colleges was presented in Chapter 4 with regard to six research questions and six hypotheses. The data analyses supplied information relevant to job satisfaction regarding motivation and hygiene factors of work on present job, opportunities for promotion, present pay, co-workers, and supervision, plus the job in general.

Regarding the motivational job satisfaction factors of work on present job and opportunities for promotion, senior administrators in Virginia's community colleges had a high level of job satisfaction with work on present job, but a low level of satisfaction with

opportunities for promotion. For the hygiene factors, senior administrators had high levels of job satisfaction related to their co-workers and supervision, but only a moderate level of satisfaction with their present pay. In addition, senior administrators had a high level of job satisfaction with the job in general.

A comparison of male and female administrators showed no difference between the genders on the motivational factor of work on present job. However, there was a significant difference between males and females on the motivational factor for opportunities for promotion with female administrators having a mean that was substantially lower than the mean for male administrators. With regard to the hygiene factors, the findings showed there was no difference between male and female administrators' satisfaction with present pay and with supervision. However, there was a statistically significant difference between the genders on the hygiene factor for satisfaction with co-workers with female administrators having a lower level of satisfaction than did male administrators. Finally, there was a significant difference between male and female administrations' satisfaction with the job in general: Female administrators had a lower level of satisfaction with the job in general than did male administrators.

The following chapter includes a summary of the research data analyses. In addition, the summary, recommendations, and conclusions based on the results of the study are presented.



## CHAPTER 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter provides a summary of the results of the material presented in Chapter 4. Conclusions based on the findings from the study as well as recommendations for additional research in the area of job satisfaction as it relates to senior administrators in the community college setting and to gender issues are also contained in this chapter.

Both job satisfaction and job dissatisfaction can serve to impact an institution of higher education. Cano and Miller (1992) suggested that high job turnover rates at the senior administrative level could result in increased expenditures as colleges recruit, hire, and train new senior administrators. In addition, excessive job turnover rates could lead to negative publicity for an institution as well as create an unsettled atmosphere for other employees. Finally, as money is used to recruit and hire new employees at the senior administrative level, other opportunities for organization growth could become more limited.

The purpose of this study was to evaluate motivational factors in senior administrators in Virginia's Community College System using Frederick Herzberg's two-factor theory of motivation regarding job satisfaction and job dissatisfaction. A second purpose of the study was to determine if there were differences between the genders with regard to motivation.

#### *Summary of Findings*

This section presents a review of the findings from the data analysis and interpretations of the statistical test results. Six research questions and six related hypotheses were addressed during the course of the study.

### *Research Question #1*

What are the job satisfaction levels of senior administrators in Virginia's community colleges on the motivational factors for work on present job and opportunities for promotion?

The job satisfaction levels of senior administrators on the motivational factors for work on present job and opportunities for promotion were examined using descriptive statistics. Senior administrators reported a very high level of satisfaction regarding work on present job. Senior administrators reported a low level of job satisfaction regarding their opportunities for promotion.

### *Research Question #2*

What are the job satisfaction levels of senior administrators in Virginia's community colleges on the hygiene factors for pay, co-workers, and supervision?

The job satisfaction levels of senior administrators on the hygiene factors for pay, co-workers, and supervision were examined using descriptive statistics. With regard to present pay, senior administrators reported a somewhat moderate level of satisfaction. However, senior administrators reported a high level of satisfaction with regard to co-workers. In addition, senior administrators reported a high level of satisfaction with current supervision.

### *Research Question #3*

What is the overall job satisfaction level of senior administrators in Virginia's community colleges on job in general?

Descriptive statistics were used to examine the overall job satisfaction level for senior administrators regarding job in general. Senior administrators reported a high level of satisfaction with regard to job in general.

#### *Research Question #4*

Are there differences between male and female senior administrators in Virginia's community colleges regarding the motivational job satisfaction factors for work on present job and opportunities for promotion?

Two hypotheses were addressed to answer Research Question #4.

Ho<sub>1</sub>: There is no difference between male and female senior administrators and their job satisfaction with work on present job.

An independent samples *t* test was used to determine if there was a difference between male and female senior administrators regarding job satisfaction for work on present job. The *t* test was not significant; therefore, the null hypothesis was retained. Male senior administrators and female senior administrators acknowledged the same level of job satisfaction regarding work on present job.

Ho<sub>2</sub>: There is no difference between male and female senior administrators and their job satisfaction with opportunities for promotion.

An independent samples *t* test was used to determine if a difference existed between male and female senior administrators with regard to opportunities for promotion. The *t* test was significant ( $p < .05$ ) and the null hypothesis was rejected. A difference did exist between the level of job satisfaction reported by male senior administrators and female senior administrators. Male senior administrators reported a higher level of job satisfaction with regard to opportunities for promotion than did female senior administrators.

#### *Research Question #5*

Are there differences between male and female senior administrators in Virginia's community colleges regarding the hygiene job satisfaction factors for pay, co-workers, and supervision?

Three hypotheses were used to answer this question.

Ho<sub>3</sub>: There is no difference between male and female senior administrators and their job satisfaction with present pay.

A *t* test for independent samples was used to evaluate whether a difference existed between male and female senior administrators regarding their level of satisfaction related to present pay. The test was not significant; therefore, the null hypothesis was retained. There was no difference between the levels of job satisfaction regarding present pay as reported by male and female senior administrators.

Ho<sub>4</sub>: There is no difference between male and female senior administrators and their job satisfaction with co-workers.

A *t* test for independent samples was used to examine whether a difference existed between male and female senior administrators regarding their level of job satisfaction related to co-workers. The *t* test was significant ( $p < .05$ ); therefore, the null hypothesis was rejected. Male senior administrators reported a greater level of job satisfaction with their co-workers than did female senior administrators.

Ho<sub>5</sub>: There is no difference between male and female senior administrators and their job satisfaction with supervision.

A *t* test for independent samples was used to evaluate whether a difference existed between male and female senior administrators regarding their level of job satisfaction related to supervision. The *t* test was not significant; therefore, the null hypothesis was retained. There was no difference between male and female senior administrators with regard to levels of job satisfaction regarding supervision.

#### *Research Question #6*

Is there a difference between male and female senior administrators in Virginia's community colleges regarding overall job satisfaction for job in general?

One hypothesis was used to examine Research Question #6.

Ho<sub>6</sub>: There is no difference between male and female senior administrators and their job satisfaction with the job in general.

A *t* test for independent samples was used to evaluate whether there was a difference between male and female senior administrators' job satisfaction with regard to job in general. The *t* test was significant ( $p = < .05$ ): therefore, the null hypothesis was rejected. Male senior administrators reported a higher level of job satisfaction with regard to job in general than did female senior administrators.

### *Conclusions*

The following conclusions were made based on an analysis of the study's findings:

1. It can be concluded that senior administrators in Virginia's community colleges find value in the work associated with their positions. Senior administrators in Virginia's community colleges reported experiencing a high level of job satisfaction regarding work itself. Herzberg (1966) identified work itself as a motivational factor in his two-factor theory. Motivational factors serve to create positive attitudes relating to the presence of job satisfaction in regard to one's work. The conclusion can be drawn that male and female senior administrators find a significant amount of job satisfaction in regard to the work associated with their positions.
2. It can be concluded that senior administrators in Virginia's community colleges experience a relatively low level of job satisfaction regarding opportunities for promotion within the state itself. Opportunities for promotion are one of the three top motivational factors according to Herzberg (1966). Therefore, the lack of opportunities for promotion can lead to low or no job satisfaction as evidenced by this study. Senior administrators who participated in the study are often viewed as being "at the top of their game." This is in relation to the fact that the only other positions available to senior administrators are the positions of president or provost or a senior

- administrative position in the Chancellor's office. With only 23 community colleges in the commonwealth, opportunities to advance to one of the afore mentioned positions are limited at best. However, community college systems exist in all 50 states. Should senior administrators seek positions outside of the Virginia Community College System, promotional possibilities exist in other states.
3. It can be concluded that senior administrators in Virginia's community colleges are only moderately satisfied with regard to pay. Herzberg (1966) identified pay as a hygiene factor, an element of the environment that can create an atmosphere for job satisfaction to occur but one that cannot directly produce job satisfaction. Based on Herzberg's (1966) theory, moderate satisfaction with pay would indicate the presence of some job dissatisfaction related to current pay.
  4. It can be concluded that senior administrators in Virginia's community colleges experience a high level of satisfaction with their co-workers. Herzberg (1996) identified co-workers or peers as a hygiene element, creating an atmosphere for job satisfaction to take place. Based on Herzberg's (1966) idea, senior administrators report no job dissatisfaction associated with colleagues.
  5. Senior administrators in Virginia's community colleges report a high level of satisfaction with current supervision that is a hygiene factor. Again, hygiene factors lead to either job dissatisfaction or no job dissatisfaction. It can be concluded that senior administrators are experiencing no job dissatisfaction regarding current supervision.
  6. It can be concluded that senior administrators in Virginia's community colleges are experiencing a high level of satisfaction in regard to their overall jobs as senior administrators. The Job in General Scale was developed to evaluate each of the five facets addressed in the Job Descriptive Index in relation to an individual's

interactions and contributions related to the overall job. Based on this idea, senior administrators find their jobs to be satisfying.

7. Male senior administrators and female senior administrators in Virginia's community colleges are equally satisfied with work on present job. It can be concluded that both male and female senior administrators experience job satisfaction in regard to their current positions and the work associated with those positions.
8. Although both male and female senior administrators in Virginia's community colleges reported relatively low levels of job satisfaction in regard to opportunities for promotion, it can be concluded that male senior administrators are significantly more satisfied with opportunities for promotions than are female administrators. At the senior administrative level, opportunities for promotions are limited within the state of Virginia. Currently, in the Virginia Community College System, there are 2 female presidents out of a possible 23 positions (VCCS College Information, 2005). (Three female presidents are listed on the VCCS website. However, Wytheville Community College has an interim president who is male). One can conclude that female senior administrators look at the difference in regard to the gender representation (91% of the college presidents are male in comparison to 9% who are female) and know that, unless they leave the community college setting in the state of Virginia, their chances of being promoted are very low based on current statistics. Conversely, it can be concluded that male senior administrators, by examining the number of presidents who are male, acknowledge that they might have a better chance of being promoted to a president's position than do female senior administrators. However, opportunities for seeking advanced positions for female senior administrators exist outside the state of Virginia. All 50 states have some type of community college system. Should female senior administrators seek employment outside the state, other possibilities for promotions do exist.

9. It can be concluded that there is no difference in the level of satisfaction reported by male and female senior administrators in Virginia's community colleges regarding present pay. However, based on the findings of Research Question #2, it can be concluded that both male and female senior administrators are only moderately satisfied with present pay.
10. It can be concluded that although both male and female senior administrators in Virginia's community colleges report a high level of job satisfaction regarding co-workers, male senior administrators experience a higher level of satisfaction with their co-workers than do their female counterparts.
11. It can be concluded that male senior administrators and female senior administrators in Virginia's community colleges are equally satisfied with current supervision.
12. It can be concluded that whereas both male senior administrators and female senior administrators in Virginia's community colleges report a high level of satisfaction with regard to the job in general, male senior administrators are more satisfied with the job in general than are female senior administrators.

### *Recommendations for Practice*

This researcher investigated motivational factors in senior administrators in the Virginia community college setting using Herzberg's (1966) idea of job satisfaction and job dissatisfaction. A second purpose of the study was to determine if there were any differences between genders with regard to motivation as it related to job satisfaction. The findings from this study could provide college administrators with information regarding elements that produce job satisfaction. According to Herzberg (1966), these elements are *motivational* factors including work on present job and opportunities for promotion, and job dissatisfaction elements, that, according to Herzberg (1966), are *hygiene* factors including present pay, co-workers, and supervision. College administrators should be able to examine the findings to determine what, if



any, differences exist regarding job satisfaction between male senior administrators and female senior administrators.

Specific recommendations include:

1. Evaluating the promotion track for senior administrators: Based on the fact that only 23 community colleges are operational in the state of Virginia, overall opportunities for promotion will continue to be limited. Nevertheless, a disparity does exist between the number of male presidents and female presidents currently serving in the Virginia Community College System.
2. Evaluating current salary levels for all senior administrators: The findings of the study indicated that there is no difference in the level of satisfaction associated with present pay for male and female senior administrators. However, all senior administrators reported only moderate satisfaction with present pay. Based on Herzberg's (1966) theory, pay as a hygiene factor can eventually--and consistently--create negative changes in job attitudes.
3. Continuing the current level of supervision: Both male senior administrators and female senior administrators reported being satisfied with supervision.
4. Examining retention rates for senior administrator positions to create a base line for future comparisons: Currently, senior administrators in the Virginia Community College System are reporting a high level of satisfaction with the work associated with their positions. If turnover rates increase, then repeating the study is warranted to determine what elements of motivation as they relate to job satisfaction have changed.
5. Additional research should be conducted to determine why male senior administrators report a higher level of satisfaction with the overall job of senior administrator than do their female counterparts and why female senior administrators report a lower level of job satisfaction with co-workers than do male senior administrators.

### *Recommendations for Further Research*

1. The only demographic assessed during this study was that of gender. Future studies should broaden the list of demographics assessed to include age, years of service, department size, specific position, race, ethnicity, and highest degree held.
2. The definition for “senior administrator” proved to be somewhat limiting for this study. Community college presidents often included individuals with the title of “Director” as part of their administrative\executive boards. Future researchers should consider including individuals with the title of “Director” as part of the study population.
3. Student enrollment populations are projected to grow considerably by 2008 and again by 2013 (“Enrollment and Student Aid,” 2004). Studies should be repeated at both of these intervals to examine the impact of growing student populations and to determine how senior administrative positions have changed to accommodate this growth.
4. The current study was limited to an investigation of motivation as it related to job satisfaction within the Virginia Community College System. Replications of this study in other state community college systems could provide opportunities for contrasting and comparing senior administrative positions within other states' community colleges.
5. The current study was limited to an investigation of motivation as it relates to job satisfaction within a community college setting. Replications of this study in both four-year public and private colleges and universities would permit a comparison of job satisfaction of senior administrators to these other groups.

## REFERENCES

- Balzer, W. K., Kihm, J. A., Smith, P. C., Irwin, J. L., Bachiochi, P. D., Robie, C., Sinar, E. F., & Parra, L. F. (1997). *Users' manual for the job descriptive index (JDI; 1997 revision) and the Job in General (JIG) scales*. Bowling Green, OH: Bowling Green State University.
- Bednar, S. G. (2003). Elements of satisfying organizational climates in child welfare agencies. *Families in Society: The Journal of Contemporary Services, 84*, 7-13.
- Behling, O., Labovitz, G., & Kosmo, R. (1968). The Herzberg controversy: A critical appraisal. *Academy of Management Journal, 11*, 99-108.
- Boice, R. (1993). New faculty involvement for women and minorities. *Research in Higher Education, 34*, 291-341.
- Bronstein, P., & Farnsworth, L. (1998). Gender differences in faculty experiences of interpersonal climate and processes for advancement. *Research in Higher Education, 39*, 561-585.
- Cano, J., & Miller, G. (1992). An analysis of job satisfaction and job satisfier factors among six taxonomies of agricultural education teachers. *Journal of Agricultural Education, 33*, 9-16.
- Crow, S. M., & Hartman, S. J. (1995). Can't get no satisfaction (employee dissatisfaction). *Leadership & Organization Development Journal, 16*, 34-39.
- Dowling, W. (Ed.). (1978). *Effective management and the behavioral sciences: Conversations from organizational dynamics*. New York: AMACOM.
- Dwore, R. B., Murray, B. P., Parsons, R., Smith, P., Vorderer, L., & Gustafson, G. (1997). Job satisfaction of selected categories of Utah hospital managers. *Hospital Topics, 75*, 14-22.
- "Effect size: The relationship between d, r, and  $r^2$ ." (2000). Retrieved March 10, 2006, from <http://web.uccs.edu/lbecker/Psy590/es.htm>
- Enrollment and student aid by the numbers. (2004, April). *The Chronicle of Higher Education, 50*, B17.
- Fedler, R. B., Counts, T., & Smith, R. F. (1984). Survey compares attitudes of male, female professors. *Journalism Educator, 39*, 3-8.
- Flaningam, R. R., & Taylor, S. V. (1984). Part-time faculty: Gender differences in job duties, support and satisfaction. *Journal of the National Association for Women Deans, Administrators, & Counselors, 47*(3), 8-13.

- Frederick Herzberg: The hygiene-motivation theory. (1999). *Thinkers*. London: Chartered Management Institute.
- Geiger, T. A. (2002). *An investigation of job satisfaction among Florida's full-time faculty at small, medium, and large community colleges using Herzberg's motivation-hygiene theory*. Unpublished doctoral dissertation. University of South Florida, St. Petersburg.
- Glick, N. L. (1992). Job satisfaction among academic administrators. *Research in Higher Education*, 33, 625-639.
- Graham, J. (1999). Virginia. In T. Tollefson, R. Garrett, & W. Ingram, & Associates, *Fifty state systems of community colleges: Mission, governance, funding, and accountability* (pp. 431-436). Johnson City, TN: The Overmountain Press.
- Harpaz, I. (1990). The importance of work goals: An international perspective. *Journal of International Business Studies*, 21, 75-94.
- Harwell, M. R. (2003). Review of the job descriptive index (1997 Revision) and the job in general scales. In B. S. Plake, J. C. Impara, & R. A. Spies (Eds.), *The fifteenth mental measurements yearbook* (pp. 490-492). Lincoln, NE: University of Nebraska Press.
- Herzberg, F. (1966). *Work and the nature of man*. Cleveland, OH: World.
- Herzberg, F. (1987). One more time: How do you motivate employees? *Harvard Business Review*, 65, 109-120.
- Hockenbury, D. H., & Hockenbury, S. E. (2003). *Psychology* (3<sup>rd</sup> ed.). New York: Worth.
- Huitt, W. (2004). Maslow's hierarchy of needs. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved January 2, 2006, from <http://chiron.valdosta.edu/whuitt/col/regsys/maslow.html>.
- Iacqua, J. A., Schumacher, P., & Li, H. C. (1995). Factors contributing to job satisfaction in higher education. *Education*, 116, 51-62.
- Job Descriptive Index. (2005). Bowling Green State University; Ohio. Retrieved March 24, 2005, from <http://www.bgsu.edu/departments/psych/JDI>
- Jones, R. E. (1997). Teacher participation in decision-making: Its relationship to staff morale and student. *Education*, 118, 76-82.
- Jung, J. (1978). *Understanding human motivation: A cognitive approach*. New York: Macmillan.
- Kiel, J. M. (1999). Reshaping Maslow's hierarchy of needs to reflect today's educational and managerial philosophies. *Journal of Instructional Psychology*, 26, 167.

- Kihm, J. A., Smith, P. C., & Irwin, J. L. (1997, July). Update for users of the JDI: New national norms for the job descriptive index. *The Industrial /Organizational Psychologist*. Retrieved March 24, 2005, from <http://www.bgsu.edu/departments/psych/JDI/kihm.html>
- Kinicki, A. J., Schriesheim, C. A., McKee-Ryan, F. M., & Carson, K. P. (2002). Assessing the construct validity of the job descriptive index: A review and meta-analysis. *Journal of Applied Psychology, 87*, 14-32.
- Knoop, R. (1994a). Relieving stress through value-rich work. *The Journal of Social Psychology, 134*, 829-837.
- Knoop, R. (1994b). Work values and job satisfaction. *The Journal of Psychology, 128*, 683-691.
- Lindzey, G. (Ed.). (1958). *Assessment of human motives*. New York: Holt, Rinehart, & Winston.
- Maidani, E. A. (1991). Comparative study of Herzberg's two-factor theory of job satisfaction among public and private sectors. *Public Personnel Management, 20*, 441-443.
- Maslow, A. H. (1954). A theory of human motivation. In G. Murphy (Ed.), *Motivation and personality* (pp.80-106). New York: Harper & Row.
- Maslow, A. H. (1968). *Toward a psychology of being* (2<sup>nd</sup> ed.). Princeton, NJ: D. Van Nostrand.
- Maslow, A. H. (1970). *Motivation and personality* (2<sup>nd</sup> ed.). New York: Harper & Row.
- McClelland, D. C. (1987). *Human motivation*. Cambridge, UK: Cambridge University Press.
- McCracken, C. G. (2001). *The relationship between stress levels and job satisfaction among community college faculty in east Tennessee*. Unpublished doctoral dissertation. East Tennessee State University: Johnson City.
- Mumford, E. (1995). Contracts, complexity, and contradictions: The changing employment relationship. *Personnel Review, 24*, 54-71.
- Murray, J. P., Murray, J. I., & Summar, C. (2000). The propensity of community college chief academic officers to leave an institution. *Community College Review, 28*, 22-29.
- Olsen, D., Maple, S. A., & Stage, F. K. (1995). Women and minority faculty job satisfaction: Professional role interests, professional satisfaction and institutional fit. *Journal of Higher Education, 66*, 267-294.
- Owens, R. G. (2001). *Organizational behavior in education: Instructional leadership and school reform* (7<sup>th</sup> ed.). Boston: Allyn & Bacon.

- Pagano, R. F. (1993). An organization tool to enhance work motivation: Part I (job satisfaction). *Physician Executive*, 19, 39-44.
- Phelps, L. H., & Waskel, S. A. (1994). Work reinforcers and explanatory style for women aged 40 to 75 years. *The Journal of Psychology*, 128, 403-408.
- Pulliam, J. D., & Van Patten, J. J. (2003). *History of education in America* (8<sup>th</sup> ed). Columbus, Ohio: Merrill Prentice Hall.
- Rantz, M. J., Scott, J., & Porter, R. (1996). Employee motivation: New perspectives of the age-old challenge of work motivation. *Nursing Forum*, 31, 29-37.
- Rice, C. (2003). *An investigation of job satisfaction and need satisfaction of department chairpersons in the Connecticut state university system*. Unpublished doctoral dissertation. University of Bridgeport, Connecticut.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, cause, and consequences*. London: Sage.
- Steers, R. M., & Porter, L. W. (1983). *Motivation and work behavior* (3<sup>rd</sup> ed.). New York: McGraw-Hill.
- Tack, M. W., & Patitu, C. L. (1992). *Faculty job satisfaction: Women and minorities in peril*. ASHE-ERIC Higher Education Report No. 4. Washington, DC: George Washington University, School of Education and Human Development.
- Tedrow, B., & Rhoads, R. A. (1999). A qualitative study of women's experiences in community college leadership positions. *Community College Review*, 27, 1-10.
- Thomas, R. M., & Brubaker, D. L. (2000). *Theses and dissertations: A guide to planning, researching, and writing*. Westport, CT: Bergin & Garvey.
- Thompson, C. (2001). *The effects of perceived leadership style on the satisfaction of mid-level student affairs administrators in institutions of higher education*. Unpublished doctoral dissertation, University of Buffalo, New York.
- Tollefson, T. A., Garrett, R. L., Ingram, W. G., & Associates. (1999). *Fifty state systems of community colleges: Mission, governance, funding, and accountability*. Johnson City, TN: The Overmountain Press.
- Vaughan, G. B. (1990). *Pathway to the presidency: Community college deans of instruction*. Washington, DC: The Community College Press.
- VCCS College Information. (2005). Retrieved January 7, 2006, from <http://www.so.cc.va.us/colleges.htm>

- VCCS Statistical Profile. (2004). *Virginia's community colleges: Statistical profiles*. Retrieved May 22, 2005, from <http://www.so.cc.va.us/aboutvccs/snapshot.htm>
- Virginia Community College System. (2005). *What's it really worth to Virginia?* [Brochure]. Retrieved May 22, 2005, from <http://www.so.cc.va.us/aboutvccs/news.htm>
- Zhang, J. J., DeMichele, D. J., & Connaughton, D. P. (2004). Job satisfaction among mid-level collegiate campus recreation program administrators. *Journal of Sport Behavior*, 6, 184-213.

## APPENDICES

### APPENDIX A

#### Supplemental List of Databases Reviewed

- PsychArticles
- Oxford University Press
- Infotrac
- Dissertation Abstracts on line



APPENDIX B

Job Descriptive Index and the Job in General Scale

JOB DESCRIPTIVE INDEX

Please indicate your gender:     Male     Female

**WORK ON PRESENT JOB**

Think of the work you do at present. How well does each of the following words or phrases describe your work?

Circle: 1 for "Yes" if it describes your work  
 2 for "No" if it does not describe it  
 3 for "?" if you cannot decide

	Yes	No	?
Fascinating.....	1	2	3
Routine.....	1	2	3
Satisfying.....	1	2	3
Boring.....	1	2	3
Good.....	1	2	3
Gives sense of accomplishment.....	1	2	3
Respected.....	1	2	3
Uncomfortable.....	1	2	3
Pleasant.....	1	2	3
Useful.....	1	2	3
Challenging.....	1	2	3
Simple.....	1	2	3
Repetitive.....	1	2	3
Creative.....	1	2	3
Dull.....	1	2	3
Uninteresting.....	1	2	3
Can see results.....	1	2	3
Uses my abilities.....	1	2	3

**PRESENT PAY**

Think of the pay you get now. How well does each of the following words or phrases describe your present pay?

	Yes	No	?
Income adequate for normal expenses.....	1	2	3
Fair.....	1	2	3
Barely live on income.....	1	2	3
Bad.....	1	2	3
Income provides luxuries.....	1	2	3
Insecure.....	1	2	3
Less than I deserve.....	1	2	3
Well paid.....	1	2	3
Underpaid.....	1	2	3

## PEOPLE AT WORK

Think of the majority of people that you work with now or the people you meet in connection with your work. How well does each of the following words or phrases describe these people?

	Yes	No	?
Stimulating.....	1	2	3
Boring.....	1	2	3
Slow.....	1	2	3
Helpful.....	1	2	3
Stupid.....	1	2	3
Responsible.....	1	2	3
Fast.....	1	2	3
Intelligent.....	1	2	3
Easy to make enemies.....	1	2	3
Talk too much.....	1	2	3
Smart.....	1	2	3
Lazy.....	1	2	3
Unpleasant.....	1	2	3
Gossipy.....	1	2	3
Active.....	1	2	3
Narrow interests.....	1	2	3
Loyal.....	1	2	3
Stubborn.....	1	2	3

## SUPERVISION

Think of your supervisor and the kind of supervision that you get on your job. How well does each of the following words or phrases describe your supervision?

	Yes	No	?
Asks my advice.....	1	2	3
Hard to please.....	1	2	3
Impolite.....	1	2	3
Praises good work.....	1	2	3
Tactful.....	1	2	3
Influential.....	1	2	3
Up-to-date.....	1	2	3
Doesn't supervise enough.....	1	2	3
Has favorites.....	1	2	3
Tells me where I stand.....	1	2	3
Annoying.....	1	2	3
Stubborn.....	1	2	3
Knows job well.....	1	2	3
Bad.....	1	2	3
Intelligent.....	1	2	3
Poor planner.....	1	2	3
Around when needed.....	1	2	3
Lazy.....	1	2	3

### OPPORTUNITIES FOR PROMOTION

Think of the opportunities for promotion that you have now. How well does each of the following words or phrases describe your opportunities for promotion?

	Yes	No	?
Good opportunities for promotion .....	1	2	3
Opportunities somewhat limited .....	1	2	3
Promotion on ability .....	1	2	3
Dead-end job.....	1	2	3
Good chance for promotion .....	1	2	3
Unfair promotion policy .....	1	2	3
Infrequent promotions.....	1	2	3
Regular promotions .....	1	2	3
Fairly good chance for promotion.....	1	2	3

### JOB IN GENERAL

Think of your job in general. All in all, what is it like most of the time? For each of the following words or phrases, circle:

	Yes	No	?
Pleasant.....	1	2	3
Bad.....	1	2	3
Ideal .....	1	2	3
Waste of time.....	1	2	3
Good .....	1	2	3
Undesirable.....	1	2	3
Worthwhile .....	1	2	3
Worse than most .....	1	2	3
Acceptable .....	1	2	3
Superior .....	1	2	3
Better than most.....	1	2	3
Disagreeable .....	1	2	3
Makes me content .....	1	2	3
Inadequate.....	1	2	3
Excellent .....	1	2	3
Rotten .....	1	2	3
Enjoyable.....	1	2	3
Poor .....	1	2	3

## APPENDIX C

### Letter to Dr. Glenn DuBois

Jewell B. Worley  
4313 Porter Road · Coeburn, VA 24230  
(276) 395-2351 · [ljw4k@uvawise.edu](mailto:ljw4k@uvawise.edu)

July 25, 2005

Dr. Glenn DuBois, Chancellor  
Virginia Community College System  
James Monroe Building  
101 North 14<sup>th</sup> Street  
Richmond, VA 23219

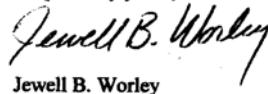
Dear Dr. DuBois:

I am writing as a follow up to our exchange of emails on April 28, 2005. Due to the amount of time that has passed, please allow me a moment to reintroduce myself. My name is Jewell Worley and I am a doctoral student at East Tennessee State University. Dr. Terry Tollefson, who is a member of my dissertation committee, suggested that I contact you in regard to seeking permission to conduct survey research with the senior administrators in Virginia's 23 community colleges. I appreciate your speedy response to my initial email and am writing to make a formal request regarding approval to conduct survey research within Virginia's community colleges. I appreciate your forwarding my request to the appropriate individuals in the Virginia Community College System and I have been in contact with a number of folks who have been very helpful.

At the direction of Dr. Charlie White, I have prepared a dissertation proposal for his review. I have enclosed a copy of that proposal for your appraisal as well as a copy of the survey instrument should you have an interest in reviewing the proposal and the instrument. I have successfully defended the dissertation prospectus to my doctoral committee at East Tennessee State University and have enclosed a copy of the signature sheet as evidence of having completed that step in the dissertation process.

Again, I appreciate your taking time to consider my request. I welcome any feedback and will be happy to supply any additional information that would be helpful in determining whether or not my proposed study is appropriate for the Virginia Community College System.

Respectfully yours,



Jewell B. Worley

APPENDIX D

Letter to Dr. Charlie White

Jewell B. Worley  
4313 Porter Road · Coeburn, VA 24230  
(276)395-2351 · [ljw4k@uvawise.edu](mailto:ljw4k@uvawise.edu)

July 25, 2005

Dr. Charlie White, Interim Vice Chancellor  
for Academic Services and Research  
Virginia Community College System  
James Monroe Building  
101 North 14th Street  
Richmond, VA 23219

Dr. White:

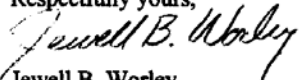
Please allow me to introduce myself. My name is Jewell Worley and I am a doctoral student at East Tennessee State University. I am writing to make a formal request regarding permission to conduct survey research with the senior administrators in Virginia's 23 community colleges.

Using the "Cooperation with Doctoral Studies and Research Projects" document, I have prepared a proposal which is enclosed with this letter. I have also enclosed a copy of the survey instrument for your review. I have successfully defended the dissertation prospectus to my doctoral committee at East Tennessee State University and have enclosed a copy of the signature sheet as evidence of having completed that step in the dissertation process. I understand that if the study is approved, I will need to contact the presidents at each of the 23 colleges who will, individually, decide whether or not to grant permission to allow me to solicit participants at each respective college.

I have been in contact with Dr. Glenn DuBois and have also provided him with a copy of the materials enclosed in this mailing.

I appreciate your taking time to consider my request. I welcome any feedback and will be happy to supply any additional information that would be helpful in determining whether or not my proposed study is appropriate for the Virginia Community College System.

Respectfully yours,

  
Jewell B. Worley

## APPENDIX E

### Approval Letter from Dr. DuBois



#### VIRGINIA COMMUNITY COLLEGE SYSTEM

James Monroe Building • 101 North Fourteenth Street • Richmond, Virginia 23219

July 28, 2005

Ms. Jewell B. Worley  
4313 Porter Road  
Coeburn, Virginia 24230

Dear Ms. Worley:

System Office staff have reviewed your dissertation proposal entitled *An Investigation of Gender Differences in Motivation of Senior Administrators in Virginia Community Colleges Using Herzberg's Two-Factor Theory*. The dissertation is in partial fulfillment of the requirements for the Doctor of Education degree at East Tennessee State University.

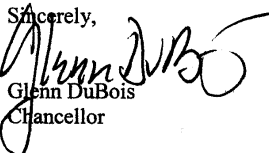
The purpose of your study is to examine gender differences in motivation among senior administrators in the Virginia Community College System. In conducting your study, you will survey presidents; vice presidents for instruction and enrollment management; provosts; deans of departments; academic deans; and instructional deans.

I am pleased to grant approval for conducting your research within the Virginia Community College System. Your next step is to contact the presidents at each of the twenty-three community colleges and seek their cooperation in the study.

Your proposed study appears to have great potential for helping colleges administrators gain a better understanding of factors related to job satisfaction that could impact senior administrative staff retention. I look forward to seeing the results of your study.

Best wishes for completing your doctoral studies.

Sincerely,

  
Glenn DuBois  
Chancellor

804-819-4901, FAX 804-819-4677, TDD 804-371-8504  
An Equal Employment Opportunity/Affirmative Action Employer  
[www.vccs.edu](http://www.vccs.edu)

APPENDIX F

Letter to the Community College Presidents

Jewell B. Worley  
P.O. Box 395 · Lexington, VA 24450

August 9, 2005

-----, President  
----- Community College  
P.O. Box  
-----, VA 20000

Dear Dr. -----:

Please allow me to introduce myself. My name is Jewell Worley and I am a doctoral student at East Tennessee State University. I recently submitted a dissertation proposal to the Virginia Community College System to conduct survey research with senior administrators at Virginia's 23 community colleges. The purpose of this study is to investigate gender differences in motivation by examining elements of job satisfaction among senior administrators. The study includes sending surveys to presidents, vice presidents for instruction and enrollment management, provosts, deans of departments, academic deans, and instructional deans. I am enclosing a sample survey for your review.

I have successfully defended the dissertation prospectus to my doctoral committee at East Tennessee State University and have received approval from Dr. Glenn DuBois and the System Office staff to proceed with the study. I have enclosed a copy of the approval letter for your review. The next step in the process is to contact each of the presidents of the 23 community colleges in the Virginia system. In the next two weeks, I will be contacting you by phone to discuss the proposed study and to ask for your approval to send surveys to you and to your senior administrators.

My desire is to produce a dissertation of value and one which will be beneficial to college administrators. I appreciate your taking time to consider my request. I welcome any feedback and will be happy to supply any additional information that would be helpful in determining whether or not to participate in this study.

Respectfully yours,

Jewell B. Worley

## APPENDIX G

### Cover Letter to Senior Administrators

Jewell B. Worley  
P.O. Box 395 ▪ Lexington, VA 24450  
(540) 464-7688 ▪ [worleyjb@vmi.edu](mailto:worleyjb@vmi.edu)

November 1, 2005

««AddressBlock»»

««GreetingLine»»

The purpose of this letter is to request your assistance in a research project that I am conducting as part of my doctoral work in the Educational Leadership and Policy Analysis Department at East Tennessee State University. I am surveying senior administrators in Virginia's community colleges in an effort to assess motivational factors based on job satisfaction. A second purpose for the survey is to determine if there are differences between the genders with regard to motivation.

I would greatly appreciate your taking the few minutes necessary to complete and return your survey. Although the proposed research has been approved by the Virginia Community College System and participation in the survey process has been approved by the president of the community college where you are currently employed, participation in the survey is *completely voluntary*.

Every attempt will be made to maintain confidentiality. A code number is included on the survey for tracking purposes. The tracking list will be destroyed once a majority of surveys have been returned. Respondents will not be identified by name, position, or campus. An informed consent is included in this mailing. Please sign and return the informed consent and the survey in the self-addressed stamped envelope. (The signed informed consent statements will be maintained in a separate file and will not be associated with the completed surveys.) I am asking that you return the survey and the informed consent by November 15, 2005.

Your cooperation is critical to the success of this research study. Thank you in advance for your time in completing the survey. If you have any questions or concerns, please feel free to contact me at the number listed above or at (540) 319-0119.

Sincerely,

Jewell B. Worley  
Doctoral Student  
East Tennessee State University



APPENDIX H

Institutional Review Board Forms

Page 1 of 3

East Tennessee State University

Institutional Review Board

PRINCIPAL INVESTIGATOR: Jewell B. Worley

TITLE OF PROJECT: An Investigation of Gender Differences in Motivation of Senior Administrators in Virginia Community Colleges Using Herzberg's Two-Factor Theory

This Informed Consent will explain the research project in which I am seeking your voluntary participation. It is important that you read the material carefully and then decide if you wish to be a volunteer. You may contact me, the chairperson of my dissertation committee, or the ETSU Institutional Review Board, at the number provided below if you have questions.

PURPOSE: The purpose of this study is to assess motivational factors in senior administrators in the Virginia Community College setting using Herzberg's idea of job satisfaction and job dissatisfaction. A second purpose is to determine if there are differences between the genders with regard to motivation.

DURATION: There are two survey instruments included on one sheet. The Job Descriptive Index should take approximately 10-15 minutes to complete. The Job in General Scale should take approximately 5-10 minutes to complete.

PROCEDURES: The Job Descriptive Index and the Job in General Scales provide words or phrases that describe your work. You will respond by writing Y (Yes), N (No), or ? (Cannot decide) beside each item. Please do not write your name on the survey. However, there is an area on the top right of the first page of the Job Descriptive Index indicating the gender of the person completing the survey. Please indicate your gender.

When you finish, please place the survey instruments in the stamped envelope and place the envelope in the mail.

POSSIBLE RISKS/DISCOMFORTS: The survey asks participants to rate relationships at work including supervisors and other people. The possibility for risk, both socially and economically, exists should individual results not be kept confidential.

POSSIBLE BENEFITS and/or COMPENSATION: There are no immediate benefits to participating in the survey. However, a potential benefit to the participant would arise from an individual's reflection upon the items contained on the survey instrument and his or her personal reaction to those items. A summary of the individual results will be provided upon request.

There is no compensation provided for participation.

Ver. 09/29/05

\_\_\_\_\_ Subject Initials

PRINCIPAL INVESTIGATOR: Jewell B. Worley

TITLE OF PROJECT: An Investigation of Gender Differences in Motivation of Senior Administrators in Virginia Community Colleges Using Herzberg's Two-Factor Theory

CONTACT FOR QUESTIONS: If you have any questions, problems or research-related medical problems at any time, you may call Jewell B. Worley at 540-319-0119 or Dr. Nancy Dishner at 423-439-6162. You may call the Chairperson of the Institutional Review Board at 423-439-6002 for any questions you may have about your rights as a research participant.

CONFIDENTIALITY: Every attempt will be made to see that my study results are kept confidential. A copy of the records from this study will be stored in the researcher's personal locked cabinet for at least 10 years after the end of this research. The results of this study may be published and/or presented at meetings without naming me as a subject. Although my rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the East Tennessee State University/V.A. Medical Center Institutional Review Board (or ETSU IRB for non-medical research), the Food and Drug Administration (if applicable), and research-related personnel from the ETSU Department of Educational Leadership and Policy Analysis have access to the study records. My records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

COMPENSATION FOR MEDICAL TREATMENT: East Tennessee State University (ETSU) will pay the cost of emergency first aid for any injury, which may occur as a result of your participation in this study. ETSU will not pay for any other medical treatment. Claims against ETSU or any of its agents or employees may be submitted to the Tennessee Claims Commission. These claims will be settled to the extent allowable as provided under TCA Section 9-8-307. For more information about claims, please call the Chairperson of the Institutional Review Board of ETSU at 423-439-6002.

VOLUNTARY PARTICIPATION: The nature, demands, risks, and benefits of the project have been explained to me as well as are known and available. I understand what my participation involves. Furthermore, I understand that I am free to ask questions and withdraw from the project at any time, without penalty. I have read, or have had read to me, and fully understand the consent form. I sign it freely and voluntarily. A signed copy has been given to me.

My study records will be maintained in strictest confidence according to current legal requirements and will not be revealed unless required by law or as note above.

Ver. 09/29/05

\_\_\_\_\_ Subject Initials

---

SIGNATURE OF VOLUNTEER/DATE

---

SIGNATURE OF INVESTIGATOR/DATE

---

SIGNATURE OF WITNESS (If applicable)/DATE

IRB FORM 108

IRB Number 00000256 Federal wide Assurance: FW A00002703

EAST TENNESSEE STATE UNIVERSITY

INSTITUTIONAL REVIEW BOARD

Protocol Number: c04-409s

PROJECT TITLE: Investigation of Gender Differences in  
Motivation of Senior Administrators in  
Virginia Community Colleges Using  
Herzberg's Two Factor Theory

PRINCIPAL INVESTIGATOR: Jewell Worley

APPROVAL DATE: October 11, 2005

Full Board Review Date: November 3, 2005

DATE FOR CONTINUATION REVIEW: September 7, 2006

The Institutional Review Board has reviewed the above-titled project with respect to the rights and safety of human subjects, including matters of informed consent and protection of subject confidentiality, and finds the project acceptable to the Board.

a.-

Andrea Clements, Ph.D.- Chair  
ETSU Campus Institutional Review Board

APPENDIX I

Follow-Up Letter to Senior Administrators

Jewell B. Worley  
P.O. Box 395 ▪ Lexington, VA 24450  
540-464-7688 ▪ [worleyjb@vmi.edu](mailto:worleyjb@vmi.edu)

November 25, 2005

Dear Senior Administrator:

A couple of weeks ago you received a mailing from me which contained a cover letter, a survey, an informed consent, and 2 self-addressed stamped envelopes. (The survey is part of a research study to investigate gender differences in motivation by examining elements of job satisfaction among senior administrators.)

If you have already completed and returned the survey and informed consent, please accept my sincere thanks. If not, please do so today (postmarked no later than Friday, Dec. 2, 2005). I am especially grateful for your help as I believe your responses have the potential for helping community college administrators gain a better understanding of factors relating to job satisfaction at the senior administrative level.

Your cooperation is critical to the success of this research study. Thank you in advance for your time in completing the survey. If you have any questions or concerns, please feel free to contact me at the number listed above or at (540) 319-0119.

Sincerely,

Jewell B. Worley  
Doctoral Student  
East Tennessee State University

## VITA

### JEWELL BEVINS WORLEY

Personal Data:      Date of Birth: September 2, 1955  
                          Place of Birth: Norton, Virginia  
                          Marital Status: Married with two children

Education:            Public Schools, Wise County, Virginia  
                          The University of Virginia's College at Wise, Wise, Virginia  
                                  Theater Arts, B.A.;  
                                  1976  
                          The University of Virginia, Charlottesville, Virginia  
                                  Education, M.Ed.;  
                                  1978  
                          East Tennessee State University, Johnson City, Tennessee  
                                  Counseling, M.Ed.;  
                                  1994  
                          East Tennessee State University, Johnson City, Tennessee  
                                  Educational Leadership and Policy Analysis, Ed. D;  
                                  2006

Professional  
Experience:            Wise County Public Schools, Virginia  
                                  Language Arts and Theater  
                                  1978-1993  
                          Central Appalachia Services, Big Stone Gap, Virginia  
                                  Mental Health Counselor  
                                  1993-1996  
                          Discovery Counseling Center and Harvest Discovery Counseling, Norton  
                                  and Big Stone Gap, Virginia  
                                  Licensed Marriage and Family Therapist  
                                  1996-2001  
                          The University of Virginia's College at Wise, Wise, Virginia  
                                  Director of Student Development and Leadership  
                                  2001-2005  
                          Virginia Military Institute, Lexington, Virginia  
                                  Licensed Professional Counselor\Licensed Marriage and Family  
                                  Therapist  
                                  2005-Current

Honors and

Awards:

Who's Who Among America's Teachers, 2005-06

Student Organization Advisor of the Year, 2005

Inducted into the Phi Kappa Phi National Honor Society, 2004

Top Ten Program Award: Virginia Association of College and University  
Residence Halls Annual Conference, 2004

Selected to participate in the 15<sup>th</sup> Annual Senior Women's Seminar Series, 2002

Virginia State Reading Association Teacher of the Year, 1989

Invited to present at the Governor's Conference on Excellence in Education,  
1988, 1989, 1991

Southwest Council Reading Teacher of the Year, 1988

Excellence in Education Award, 1988, 1985

Awarded a Challenge Grant in Reading, 1985

Dogwood Players Drama Award, King College, 1973