

JOB SATISFACTION OF THE OCCUPATIONAL-TECHNICAL FACULTY
IN THE VIRGINIA COMMUNITY COLLEGE SYSTEM: AN ANALYSIS
BASED ON HERZBERG'S MOTIVATION-HYGIENE THEORY

by

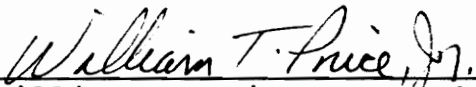
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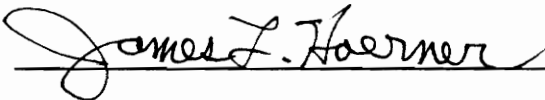
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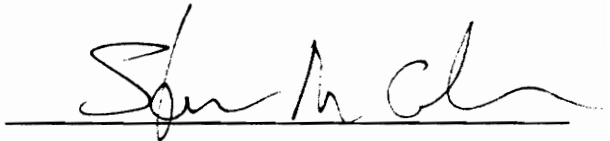
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(ABSTRACT)

Job satisfaction and its related phenomena have been of considerable interest for many years. Review of the job satisfaction literature, however, revealed few studies which examined the job satisfaction of both full-time and part-time community college faculty. The purpose of the study was (1) to determine the level of job satisfaction among occupational-technical faculty in relation to ten factors based on Herzberg's et al. (1959) Motivation-Hygiene Theory and (2) to determine the relative difference of job satisfaction between full-time and part-time occupational-technical faculty in the Virginia Community College System.

Specific research questions explored the level of job satisfaction, the level of job satisfaction among the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory, and the proportion of variance in job satisfaction explained by selected demographic variables among full-time and part-time occupational-technical faculty in the Virginia Community College System. A total of 255 occupational-technical faculty were selected to participate in the study,

127 full-time and 128 part-time. These faculty were mailed a packet of survey materials containing a Data Form and a modified version of the Wood's Faculty Satisfaction/Dissatisfaction Scale. The overall usable response rate was 70.2% (n=177). The response rate for the full-time occupational-technical faculty was 78.6% (n=99) while the response rate for the part-time occupational-technical faculty was 62.4% (n=78).

Results of the study indicated that both the full-time and part-time occupational-technical faculty were generally satisfied with their jobs, 76.7% and 89.7% respectively. Both full-time and part-time occupational-technical faculty reported the highest level of satisfaction for the factor the work itself and the lowest level of satisfaction for the factor salary.

Although both full-time and part-time occupational-technical faculty were generally satisfied with their jobs, the part-time faculty were more satisfied with their jobs than were their full-time counterparts. It should be noted, however, that the actual proportion of variance explained by status (i.e., full-time or part-time) was small and may not be of practical significance. Recommendations for local and state level administrators responsible for supervising full-time and part-time occupational-technical faculty were delineated. Recommendations for future research were described.

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Chapter 1

Introduction

Job satisfaction and its related phenomena have been of considerable interest for many years. This attention becomes readily apparent by the volumes of literature devoted to the study of job satisfaction among employees in business, government, and education. During the course of a working lifetime, a person may spend well over 90,000 hours on the job; thus, the concern with job satisfaction should be no surprise.

The study of job satisfaction can be traced back several centuries. During the early 17th century, Ramazzini, a bureaucrat from Modena, Italy, studied the dismay on the faces of the workers cleaning the city cesspool. Ramazzini subsequently interviewed these workers and wrote a report about their feelings toward work (Kiechel, 1989).

In the 1920s, Elton Mayo and his associates from Harvard University studied the effects of environmental conditions on worker productivity at the Hawthorne Western Electric Company in Illinois. As a result of these studies, Mayo became convinced that worker productivity and satisfaction with work tasks were influenced by an array of social factors (Mayo, 1933). Workers were reported to be more productive on the job and to be more satisfied with

their work when the human interaction on the job was positive.

In the mid-1930s, Robert Hoppock (1935) studied the job satisfaction of 500 teachers from 51 urban and rural communities in the Northeastern United States. In the study, teachers were asked to estimate their job satisfaction by responding to questions on four attitude scales. The scores of the four scales were combined to obtain a composite index of job satisfaction for each teacher. The 50 most satisfied teachers were reported to be emotionally stable, to enjoy better human relationships with superiors and associates, and to feel more successful. By contrast, the 50 most dissatisfied teachers were reported to have found their jobs monotonous, to have suffered high levels of fatigue, and to be about seven and one-half years younger than their more satisfied colleagues (Hoppock, 1935). Thus, it seems that the greater the level of satisfaction experienced by the teacher, the greater their level of stability, the better their relationships with their colleagues, and the greater their feeling of success.

In the late 1950s, Frederick Herzberg (1959) and his co-authors of The Motivation to Work described a study which tested the hypothesis that job satisfaction and job dissatisfaction are caused by two different sets of factors. As a result of his study of 203 engineers and accountants in

the Pittsburgh, Pennsylvania area, Herzberg and his colleagues concluded that the factors involved in producing job satisfaction are separate and distinct from the factors that lead to job dissatisfaction. The first set of factors, which Herzberg called "motivators," contained components related to the content of the job itself. The second set of factors, which Herzberg called "hygienes," contained elements related to the job environment (Herzberg, Mausner, & Snyderman, 1959). Thus, according to Herzberg et al. (1959), motivation factors such as the work itself lead to job satisfaction while hygiene factors such as pay lead to the maintenance of job satisfaction but does not lead to an increase in job satisfaction.

Through these and other studies of job satisfaction, managers have discovered that greater production; and hence greater profit, result when workers are satisfied with their jobs. This sentiment is best expressed by Steers and Porter (1975) when they stated, "Improve the morale of the company and you improve production" (p. 224).

Concentration on job satisfaction has not been limited to people in business and industry. A comprehensive computer search of ERIC Abstracts using the descriptor "job-satisfaction in de" between January 1982 and September 1993 resulted in 2,191 citations. A large part of the interest in job satisfaction of individuals in education has been

focused in higher education. Reasons for this increased interest in the job satisfaction among faculty in higher education is best explained by Kelly (1989) when he stated that "During the last two decades, . . . researchers have focused their attention on the phenomena of job satisfaction among college and university faculty as a way of assessing the nature of work motivation in academia" (p. 466).

One group in which the study of job satisfaction has received attention is that of community college faculty. A search of ERIC Abstracts combining the descriptors "job-satisfaction in de, community-colleges in de, and faculty in de" between January 1982 and September 1993 uncovered 45 citations. A more focused search of ERIC Abstracts combining the descriptors "job-satisfaction in de, faculty in de, community-colleges in de, and technical-education in de" between January 1982 and September 1993 revealed only one citation. Despite the previous attention provided for the study of job satisfaction among community college faculty, there is a gap in the literature concerning the job satisfaction of occupational-technical faculty in community colleges.

The lack of job satisfaction research among occupational-technical faculty in community colleges is alarming considering the number of researchers who cite the importance of continually monitoring faculty satisfaction

(e.g., Benoit & Smith, 1980; Hutton & Jobe, 1985; McBride, Munday, & Tunnell, 1992; Milosheff, 1990). One reason researchers have supported the continued study of job satisfaction of community college faculty is the value of the information received during such studies in developing and improving community colleges. Benoit and Smith (1980), after studying the job satisfaction of community college instructors in Florida, advocated the continued study of job satisfaction among community college faculty by noting that "Periodic surveys . . . should provide useful information for further development and improvement of community colleges. Studies [of job satisfaction] . . . can help college and state level administrators identify possible areas for staff development, as well as useful evaluation data regarding their own administrative effectiveness" (p. 270).

Further evidence pointing to the need for studying job satisfaction among community college faculty is provided by Hutton and Jobe (1985). After studying the job satisfaction of faculty from 14 Texas community colleges they concluded:

[Since] the job satisfaction of faculty may directly impact student achievement . . . more descriptive work is needed to further document features of job satisfaction among . . . community college faculty Further, as colleges . . . recognize

the impact of job satisfaction on other variables, . . . administrators may wish to plan for periodic assessment of job satisfaction so that areas of least satisfaction may be explored and if problems exist, they may be corrected or modified. (p. 324)

The need to continually assess job satisfaction of community college instructors was also reported by Milosheff (1990) at the conclusion of her study about job satisfaction among community college faculty. In support of the continued study of job satisfaction among community college faculty Milosheff (1990) stated ". . . as colleges recognize the impact of job satisfaction on outcomes such as student achievement, productivity, and faculty turnover at the college, administrators may wish to make periodic assessments of the level of job satisfaction experienced by their own faculty" (p. 20). In addition, as explained by Milosheff (1990), "More research should be done to determine how to enhance those conditions that lead to job satisfaction" (p. 20).

The need to continuously study the job satisfaction of community college faculty was most recently reported by McBride et al. (1992). As a result of their study of the job satisfaction of community college faculty from 11 states, McBride et al. (1992) advocated the continued study of job satisfaction by stating that:

Administrators must recognize the retention of highly satisfied faculty is essential to the learning environment provided for community college students. Instructional administrators should make themselves aware of the overall levels of job satisfaction among their faculty and should assess the levels of satisfaction with the various job satisfaction components [intrinsic and extrinsic]. Keeping the finger on the pulse [job satisfaction] will alert the administrator to potential problems and will allow him or her to take the necessary actions to maximize the retention of the institution's most valuable resource. (pp. 163-164)

The need to study the job satisfaction of community college faculty is magnified considering the rapid growth in the number of students attending community colleges and the rapid growth in the number of faculty teaching in community colleges. According to the American Association of Community and Junior Colleges (1990), there were over five million students enrolled in public community colleges in the United States during the fall semester of 1988. These students represented 40% of all undergraduates in the U.S. Further, a number of researchers have reported a rapid increase in the number of faculty teaching in community colleges (e.g., Gappa, 1984; Samuel, 1989; Smith, 1990;

Spinetta, 1990). This expansion is especially true among part-time faculty. The increased use of part-time faculty is prevalent in many state but it has been reported more extensively in both New York (Samuel, 1989) and California (Smith, 1990).

Purpose of the Study

The purpose of this study was (1) to determine the level of job satisfaction among occupational-technical faculty in relation to ten factors based on Herzberg's et al. (1959) Motivation-Hygiene Theory and (2) to determine the relative difference in job satisfaction between full-time and part-time occupational-technical faculty in the Virginia Community College System.

Specifically, answers to the following questions were sought:

1. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System?
2. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System?
3. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia

Community College System on the level of job satisfaction?

4. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
5. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
6. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?

7. What proportion of the variance in the level of job satisfaction on the mean of the summation of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, working conditions, and overall satisfaction (item 70) is explained by the following participant characteristics:

- a. gender
- b. age
- c. level of education
- d. years of teaching experience in the Virginia Community College System
- e. employment status (i.e., full-time or part-time)

Significance of the Study

An extensive review of the literature reveals a need to continually monitor the job satisfaction of community college faculty. The level of job satisfaction among community college faculty has been reported to influence student achievement as well as faculty productivity and commitment. Results of this study will provide local and state community college administrators with insight into the job satisfaction of both full-time and part-time

occupational-technical faculty. This insight will assist them in developing programs to increase the job satisfaction of their faculty which in turn should result in increased student achievement and faculty productivity and commitment. An understanding of the job satisfaction of both full-time and part-time faculty is especially important since the use of part-time faculty has increased dramatically in the last few decades in response to the educational programming requested by constituents in the locations served by community colleges.

In addition, the study will serve as a base for any future studies involving both full-time and part-time occupational-technical faculty in the Virginia Community College System. Few studies have been conducted comparing the job satisfaction of full-time and part-time community college faculty and none of these studies have focused specifically on occupational-technical community college faculty.

Limitations and Delimitations

The limitations and delimitations of the study are presented in the next section.

Limitations

1. This study was limited in that the sample of participants was not a probability sample.

Therefore, the sample was not necessarily representative of the occupational-technical faculty in the Virginia Community College System.

Delimitations

1. The participants in this study were delimited to those full-time and part-time occupational-technical faculty teaching in the selected Virginia community colleges during the 1993 fall semester.
2. The part-time faculty were further delimited to those who were teaching courses for credit.

Definition of Terms

The following terms are defined as they apply to this study:

Achievement--the successful completion of a job, solutions to problems, and observation of the results of one's work. Also included are the opposite of achievement--the failure to complete a job, to find solutions to problems, and to observe the results of one's work (Wood, 1973).

Full-time faculty--those individuals classified as full-time by their respective community college.

Growth--the likelihood that an individual can move upward within their organization or that they can advance their own skills in the profession (Wood, 1973).

Hygiene factors--the events associated with conditions that surround the performing of a job but not associated with the job itself. When these factors deteriorate below an acceptable level, job dissatisfaction ensues (Wood, 1973).

Interpersonal relations--interactions that arise among people in the performance of their jobs (Wood, 1973).

Job dissatisfaction--the condition of discontent with one's work and its environment, thus denoting a negative attitude (Wood, 1973).

Job satisfaction--the condition of contentment with one's work and its environment, denoting a positive attitude (Wood, 1973).

Motivation factors--those job factors which reward the needs of the individual to reach his or her aspirations. While both hygiene and motivation factors meet the needs of the individual, it is primarily the motivators that bring about job satisfaction (Wood, 1973).

Occupational-technical faculty--those faculty teaching courses in the areas of business and commerce, data processing, health services and paramedical, mechanical and engineering, natural science, and public service related technologies (Hegis Codes 5000-5499).

Organizational policy and administration--those components of a sequence of events in which some overall aspect of the organization is a factor. Two kinds of characteristics are

included--the adequacy or inadequacy of institution organization and management and the harmfulness of beneficial effects of the organization's policies (Wood, 1973).

Overall satisfaction--refers to the general self-appraisal of the level of job satisfaction/dissatisfaction based on responses to the last item in the Wood's Faculty Satisfaction/Dissatisfaction questionnaire (Wood, 1973).

Part-time faculty--those individuals classified as part-time by their respective community college.

Recognition--refers to some act of acknowledgement of a person by another person and may take such forms as notice, praise, criticism, or blame (Wood, 1973).

Responsibility--refers to satisfaction or lack of it derived from the level of responsibility and authority given to a person (Wood, 1973).

Salary--the compensation one receives for their efforts at work.

Satisfaction--the calculated level of job satisfaction/dissatisfaction based on all items related to satisfaction. Satisfaction is a summary of motivator, hygiene, and overall items (Wood, 1973).

Supervision--the competence/incompetence, fairness/unfairness of the supervisor and his or her

willingness/unwillingness to delegate responsibility and authority and to train subordinates (Wood, 1973).

Virginia Community College System--the system of 23 state-operated community colleges and their branch campuses in the Commonwealth of Virginia.

Working conditions--the physical conditions of work--the amount of work, environmental characteristics, or the facilities available for doing the work (Wood, 1973).

Work itself--the actual performance of a job or tasks of the job as a source of positive or negative feelings (Wood, 1973).

Organization

This dissertation is divided into five chapters. Chapter 1 provides an introduction to the problem, purpose of the study, significance of the study, and definitions of terms. Chapter 2 consists of a review of the literature and theoretical framework for the study. Chapter 3 outlines the research design, methodology, data collection procedures, and statistical analyses of the data. Chapter 4 provides a breakdown of the survey return rates and the research findings for each research question. Chapter 5 presents a discussion of the findings and recommendations. The reference list, appendices, and vita follow Chapter 5.

Chapter 2

Review of Related Literature

The contents of this chapter include a general discussion of job satisfaction. Further, it contains a discussion of several alternative views of job satisfaction, a discussion of Herzberg's et al. (1959) Motivation-Hygiene Theory, a rationale for selecting Herzberg's et al. (1959) Motivation-Hygiene Theory as a basis for this study. Also, the applicability of Herzberg's et al. (1959) Motivation-Hygiene Theory in educational settings is reviewed followed by an examination of the term job satisfaction. Finally, the independent variables included in the study are presented.

Job Satisfaction

There is little doubt that job satisfaction is one of the most widely studied topics in the social sciences. The reasons for this wide spread interest in the study of job satisfaction are several. For one, most individuals spend a large part of their working lives on the job. As a result, the understanding of the factors which affect a person's job satisfaction/dissatisfaction is important because these sentiments may ultimately impact upon the lives of many other individuals (i.e., fellow employees, family members, etc.). A second commonly reported reason for studying the job satisfaction/dissatisfaction of employees is the belief

that as a person's job satisfaction increases, so too, will their productivity (Gruneberg, 1979).

As explained by Gruneberg (1979), the current theories of job satisfaction can be divided into two categories: process and content. Process theories try to explain the manner in which variables such as expectations, needs, and values interact with the characteristics of the job to produce job satisfaction/dissatisfaction. The Expectancy Theory proposed by Vroom (1964) and the Equity Theory proposed by Adams (1963) are examples of process theories of job satisfaction. Content theories, by contrast, consider the factors which influence job satisfaction. Maslow's (1943) Need Theory and Herzberg's et al. (1959) Motivation-Hygiene Theory are examples of content theories of job satisfaction.

Alternative Theories of Job Satisfaction

Four alternative theories of job satisfaction are discussed. These four theories are the expectancy, equity, needs, and motivation-hygiene.

Expectancy Theory

One of the most widely known approaches to human motivation is Vroom's (1964) Expectancy Theory. According to Vroom (1964), a person's desire to be productive in the workplace depends on their perceptions of the relative worth of their performance. Vroom (1964) called this relative

worth valance. The strength of valance is dependent upon how strongly the person desires the outcome expected for their performance. An outcome may be either extrinsic or intrinsic (i.e., pay or personal satisfaction). A person who desires the outcome over not having the outcome would have a positive valance. A person who preferred not to have the outcome over having the outcome is experiencing negative valance. A person who is indifferent as to whether or not they receive the outcome is experiencing zero valance.

As explained by Vroom (1964), the outcomes a person attains is dependent upon factors both within their control and beyond their control. The majority of decisions individuals make involve some risk. When individuals must choose between alternatives that involve uncertain outcomes, their behavior is influenced by both preferences of the possible outcomes and the likelihood to which that desired outcome is obtainable. Vroom (1964) described these expectations in terms of their strength. A maximum strength expectancy is evident when the person believes that the act will be followed by the outcome. Minimal strength is indicated by the person believing that the act will not be followed by the outcome. A person will be the most motivated and the most satisfied with their jobs when they believe the outcome they desire will be followed by their efforts on the job.

Equity Theory

As Adams (1963) explained, "Whenever two individuals exchange anything, there is a possibility that one or both of them will feel that the exchange was inequitable" (p. 422). On one side of this exchange process are inputs. Inputs can take the form of education, experience, training, skill, and effort expended on the job. Inputs are what people perceive as their contribution to the exchange for which they expect a fair return. On the other side of this exchange process are the rewards received by people for their efforts. Adams (1963) called these rewards outcomes. Outcomes may take the form of pay, seniority benefits, fringe benefits, and job status symbols (Adams, 1963).

Proponents of the equity theory propose that how motivated or satisfied employees are depends largely on how well they are being treated in reference to others. In essence, the primary argument by advocates of the equity theory is that job performance and job satisfaction are directly related to the degree of equity or inequity a person perceives in the work environment. To determine the degree of equity or inequity on the job, a person compares their inputs and outcomes to those of a similar other. A similar other is a person doing the same or similar type of job. If the person doing the same or a similar type of job. If the person doing the comparing perceives that their

input to outcome is lower than the similar other, than job dissatisfaction is likely to occur (Steers & Porter, 1979). The ratio indicates the degree of job satisfaction or dissatisfaction.

Need Theory

Several theorists have proposed that job satisfaction involves the fulfillment of individual needs (e.g., Alderfer, 1969, 1972; Maslow, 1943). Maslow (1943) presented the notion of a hierarchy of needs as a means of motivating individuals. These needs were divided by Maslow (1943) into five categories: (1) physiological needs, (2) safety needs, (3) love needs, (4) esteem needs, and (5) self-actualization needs. Maslow (1943) labeled the first three needs lower order and the last two needs higher order. The thrust of Maslow's (1943) position is that lower-order needs must first be satisfied before higher-order needs can be satisfied. Maslow (1943) does, however, acknowledge that not all individuals will follow the sequence presented in his hierarchy of needs. Some people, according to Maslow (1943), will satisfy a higher-order need as a means to an end in satisfying a lower-order need.

Gruneberg (1979) illustrated Maslow's (1943) theory in the work setting by noting ". . . that only after the lower order needs for security and pay have been satisfied will the employee seek satisfaction and achievement from the work

itself" (p. 10). In Gruneberg's (1979) example, security and pay are the lower-order needs that the worker would have to satisfy before satisfying the self-esteem and actualization needs associated with the work itself.

Herzberg's Motivation-Hygiene Theory

The approach which has probably generated the most research in the area of job satisfaction and certainly the most controversy is Herzberg's Motivation-Hygiene Theory (Herzberg et al., 1959, Herzberg, 1966). The work of Herzberg (1959) and his colleagues broke with some of the traditional experimental approaches to job satisfaction. The data collection techniques used by Herzberg (1959) and his colleagues emphasized structured, in depth interviews of workers. Further, they attempted to determine what critical incidents or events on the job were associated with high satisfaction and what critical incidents or events on the job were associated with high dissatisfaction. These responses were subjected to content analyses; and as a result, various factor commonalities in the sequences were identified (Herzberg et al., 1959).

Based on such analyses, Herzberg (1959) and his colleagues concluded that (1) certain factors were frequently associated with feelings of satisfaction on the part of the workers and (2) certain different factors were associated with feelings of dissatisfaction on the part of

the workers. The satisfiers or motivators, as they came to be called, included job content factors such as achievement, recognition, advancement, responsibility, and the work itself. The dissatisfiers or hygienes were content factors such as company policies and practices, interpersonal relations with co-workers, interpersonal relations with supervisors, the technical aspects of supervision, salary, and working conditions. Herzberg (1959) and his colleagues theorized that satisfaction is a function of both the satisfiers and dissatisfiers. If the positive aspects of both satisfiers and dissatisfiers are present at sufficient levels, then satisfaction will be high. If the satisfiers are removed indifference will occur. Indifference is a worker's feeling of not being either satisfied or dissatisfied. Thus, a worker is not dissatisfied. Dissatisfaction occurs only when the negative aspects of the dissatisfiers are present. Thus, the positive aspects of these dissatisfiers establish necessary but not sufficient conditions for satisfaction. Job satisfaction is seen by Herzberg (1959) and his colleagues as being a two-dimensional construct, thus the label "two factor."

Rationale for Selecting Herzberg's Motivation-Hygiene Theory

Herzberg's et al. (1959) Motivation-Hygiene Theory was selected as the theoretical base of this study for two reasons. One, a number of researchers have tested the applicability of Herzberg's et al. (1959) theory in educational settings. The results of these many studies lend support for its continued use in educational settings. A presentation of studies supporting the continued use of Herzberg's et al. (1959) theory in educational settings is presented in the next section. Two, Dr. Olin R. Wood granted the researcher permission (see letter Appendix A) to use his job satisfaction instrument: Wood's Faculty Satisfaction/Dissatisfaction Scale (Appendix E). This job satisfaction scale was designed for use with community college faculty and has as its theoretical base Herzberg's et al. (1959) Motivation-Hygiene Theory. An expanded discussion of this instrument appears in Chapter 3.

The Application of Herzberg's Theory in Educational Settings

A large number of researchers have attempted to apply Herzberg's et al. (1959) Motivation-Hygiene Theory in educational settings (e.g., Abreu, 1980; Aebi, 1972; Allison, 1985; Andrew, 1983; Bierman, 1993; Bober, 1977;

Burr, 1981; Caldwell, 1992; Gould, 1987; Griffin, 1991; Groseth, 1978; Handy, 1976; Hill, 1986-1987; Lacewell, 1983; Leavitt, 1986; Leon, 1973; Lyons, 1970; May, 1978; Medved, 1971, 1982; Nussel, Rusche, & Wiersma, 1988; Openshaw, 1980; Passalacqua, 1970; Pedersen, 1989; Schmidt, 1976; Sergiovanni, 1967; Silver, 1967; Swierenga, 1970; Walker, 1979; Wolfson, 1987; Wozniak, 1973; Young & Davis, 1983). The application of Herzberg's et al. (1959) theory in educational settings has resulted in mixed findings. The findings of these studies have ranged from those strongly supporting Herzberg's et al. (1959) theory to those earnestly refuting Herzberg's et al. (1959) theory. The largest number of studies, however, provide support for applying Herzberg's et al. (1959) theory in educational settings.

Support for Herzberg's Theory

A number of researchers have reported results supporting the applicability of Herzberg's et al. (1959) theory in educational settings (e.g., Abreu, 1980; Andrew, 1983; Burr, 1981; Caldwell, 1992; Gould, 1987; Groseth, 1978; Hill, 1986-1987; Leavitt, 1986; Leon, 1973; Nussel et al., 1988; Passalacqua, 1970; Pedersen, 1989; Schmidt, 1976; Sergiovanni, 1967; Silver, 1967; Walker, 1979; Wozniak, 1973). Leon (1973), for example, replicated the Herzberg et al. (1959) study on a sample of faculty from selected state

colleges in Oklahoma, Arkansas, Missouri, and Kansas. In the study, Leon (1973) attempted to determine if motivators were the leading cause of job satisfaction and if hygienes were the leading cause of job dissatisfaction among college professors as proposed by Herzberg et al. (1959). The results of the study supported the applicability of Herzberg's et al. (1959) Two-Factor Theory of job satisfaction to college professors.

Hill (1986-1987) studied the job satisfaction of college faculty from the perspective of Herzberg's et al. (1959) Two-Factor Theory. The purpose of the study was to assess the usefulness of Herzberg's et al. (1959) theory for explaining the variations in the job satisfaction of faculty in colleges and universities. Subsequent analysis of the data provided by 1,089 respondents supported the notion that the job satisfaction of college and university faculty consists of two different and unrelated dimensions-- intrinsic and extrinsic. As noted by Hill (1986-1987), this support for Herzberg's et al. (1959) theory was derived from a study using a technique other than the critical events approach. In the Hill (1986-1987) study, a 45-item Likert-type inventory designed to explore both the intrinsic and extrinsic features of work in higher education was used. Components of the two factors described by Herzberg et al. (1959) were used to develop the various facets and factors

of job satisfaction. The successful use of a Likert-type scale based on Herzberg's et al. (1959) theory to measure the job satisfaction of college and university faculty lends support to the use of a similar instrument in this study.

Nussel et al. (1988) tested the applicability of Herzberg's et al. (1959) theory on a population of teacher educators in 39 public and 25 private institutions. In response to the applicability to Herzberg's et al. (1959) theory to teacher educators Nussel et al. (1988) stated, "The answer is a qualified YES" (p. 49). The work itself accounted for high levels of satisfaction among teacher educators. The highest levels of satisfaction were directly related to the challenges of being a teacher educator. In congruence with Herzberg's et al. (1959) theory, the lower levels of satisfaction were associated with environmental factors such as administration and salary (Nussel et al., 1988). The results of this study lends further support to the continued use of Herzberg's et al. (1959) theory in educational settings.

Sergiovanni (1967) attempted to determine if the factors reported by teachers would distribute themselves into mutually exclusive satisfaction and dissatisfaction categories as proposed by Herzberg et al. (1959). Subsequent analysis of the data supported Herzberg's et al. (1959) contention that satisfiers and dissatisfiers tend to

be mutually exclusive. In addition, as noted by Sergiovanni (1967), the factors reported by teachers which resulted in high teacher attitudes were related to the work itself while factors which accounted for low teacher attitudes were related to the work environment. The findings of this study supply additional support for applying Herzberg's et al. (1959) theory in educational settings.

Silver (1967) reported that much controversy surrounded the applicability of Herzberg's et al. (1959) Motivation-Hygiene Theory to populations other than those in the original Herzberg et al. (1959) studies. To help resolve this controversy, Silver (1967) designed three studies to test Herzberg's et al. (1959) theory in unique ways. All three studies were conducted using the same sample of 92 educators. Of these 92 educators, 78 were teachers, ten were department heads, and four were principals. In addition, all respondents were unfamiliar with Herzberg's et al. (1959) theory; and all were part-time students in educational administration classes. Silver (1967) reported that the results from all three studies indicated that motivator categories were, in general, distinct from hygiene categories. Results from this study lends support to the notion that Herzberg's et al. (1959) theory can be applied in educational settings using an array of approaches.

Partial Support for Herzberg's Theory

Several investigators have provided only partial support for the application of Herzberg's et al. (1959) theory in educational setting (e.g., Aebi, 1972; Allison, 1985; Griffin, 1991; Handy, 1976; May, 1978; Swierenga, 1970; Wolfson, 1987). In a test of the applicability of Herzberg's et al. (1959) Dual-Factor Theory on a sample of over 200 faculty at a large Midwestern university, Swierenga (1970) reported only partial support for Herzberg's et al. (1959) theory. Swierenga (1970) explained that the results of the study indicated that if a motivator contributed to a feeling of job satisfaction, its absence did not necessarily result in feeling of dissatisfaction. In addition, many of Herzberg's et al. (1959) hygiene factors could have been classified as motivator factors as they seemed important to job satisfaction when present, but not important to job dissatisfaction when absent. As noted by Swierenga (1970), the study tended to accept Herzberg's et al. (1959) notion relative to the relationship of a motivator factor as a satisfier when present, and the same factor as a dissatisfier when absent.

No Support for Herzberg's Theory

A number of researchers have provided no support for the application of Herzberg's et al. (1959) theory in educational settings (e.g., Bober, 1977; Lacewell, 1983;

Lyons, 1970; Medved, 1971, 1982; Openshaw, 1980). Bober (1977) attempted to determine if Herzberg's et al. (1959) Dual-Factor Theory could be applied to faculty in schools of pharmacy. The population for this study consisted of all the full-time faculty teaching at 72 colleges and schools of pharmacy in the U.S. The resulting sample consisted of 360 pharmacy faculty members--144 administrators and 216 faculty. Subsequent analysis of the data did not support Herzberg's et al. (1959) Dual-Factor Theory of job satisfaction. Bober (1977) reported that both motivation and hygiene factors were sources of satisfaction and dissatisfaction.

Lacewell (1983) tested the applicability of Herzberg's et al. (1959) Motivator-Hygiene Theory of job satisfaction to faculty in community colleges and area post-secondary vocational-technical schools in Arkansas. The results of the study did not support the application of Herzberg's et al. (1959) Motivator-Hygiene Theory to faculty in these institutions. Lacewell (1983) reported no clear distinction between motivator factors and hygiene factors. As reported by Lacewell (1983), "Some hygiene factors showed higher relationships to satisfaction than did some of the motivator factors" (p. 80). Although the findings presented by Lacewell (1983) fail to sustain Herzberg's et al. (1959)

theory, he did offer an explanation for this lack of support:

It is possible that this lack of agreement with the hypotheses stated by Herzberg is a result of the methodology used in this study (the questionnaire method) as compared to the methodology used by Herzberg and his associates (the critical-incident interview method) (p. 81).

Dependent Variable

A discussion of the dependent variable job satisfaction follows. Further, an explanation of how job satisfaction is defined in this study is presented.

Job Satisfaction

A principal problem in job satisfaction research is in defining job satisfaction. Researchers working in narrow disciplines define job satisfaction in terms which are easiest for them to work. These various definitions of job satisfaction make the comparison of findings across studies difficult (Carrol, 1973). Carrol (1973) illustrated this point by noting, "The three terms job satisfaction, job attitude, and morale cause confusion because many authors use them interchangeably while others draw significant distinctions between them" (pp. 1-2). Examples of these various definitions of job satisfaction follow.

Hoppock (1935) proposed one of the earliest definitions by defining job satisfaction as ". . . any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say, 'I am satisfied with my job'" (p. 47). Beer (1964) in a study of the relationship between organizational size and job satisfaction defined job satisfaction as ". . . the attitude of workers toward the company, their job, their fellow workers and other psychological objects in the work environment" (p. 34). Several researchers have even attempted to use portions of the definitions developed by others when constructing their own definition of job satisfaction. Ivancevich and Donnelly (1968), for instance, used parts of the definitions of Herzberg, Maslow, Vroom, and Wherry to define job satisfaction ". . . as the favorable viewpoint of the worker toward the work role he presently occupies" (p. 172). A discussion of the dependent variable job satisfaction as it is used in this study follows.

For the purpose of this study, the dependent variable was the perceived level of job satisfaction among the participating full-time and part-time occupational-technical faculty. The participants' level of job satisfaction was determined by their responses to the Wood's Faculty Satisfaction/Dissatisfaction Scale.

Independent Variables

Independent variables include age, gender, education, years of teaching experience in the Virginia Community College System, and employment status (i.e., full-time or part-time). A discussion of each independent variable follows.

Age and Job Satisfaction

The variable age has been included in a large number of job satisfaction studies (e.g., Bourne, 1982; Chung, 1989; Clarke, Gerrity, Laverdiere, & Johns, 1985; Hill, 1983; Kalleberg & Loscocco, 1983; Hulin & Smith, 1965; Janson & Martin, 1982; King, Murry, & Atkinson, 1982; Lowther, Gill, & Coppard, 1985; Morrow & McElroy, 1987; Mottaz, 1987; Reeves, 1991; Rottier, Kelly, & Tomhave, 1983; Tucker, 1990; Wright & Hamilton, 1978). Mottaz (1987), using a sample of workers from a small university, five elementary schools, a plastics factory, a small order-processing firm, a hospital, and a large law enforcement agency, investigated the relationship between age and job satisfaction. The workers from these organizations were grouped into two occupational categories: upper-level and lower-level. Upper-level employees consisted of professional and managerial workers while lower-level employees consisted of clerical, service, and blue-collar workers. Analysis of the data revealed that work satisfaction increased with age in both occupational

categories. In addition, workers in the upper-level occupations were reported to be significantly more satisfied with work than their counterparts in the lower-level occupations. As a result of these findings, Mottaz (1987) concluded that overall job satisfaction is positively related to age and to occupational level.

Clarke et al. (1985) reported that the literature provides abundant evidence to support both the U-shape and the linear relationships of age and job satisfaction. The U-shape relationship results in the interim reduction of the employee's job satisfaction which then increases as the number of years the employee spends on the job increases. With the linear relationship as the number of years of work experience acquired in a particular job increases, so too, does the person's level of job satisfaction. Clarke et al. (1985) tested two hypothesis in an attempt to validate the linear theory of job satisfaction as it applies to teachers. The findings of the study were mixed. The first hypothesis, that there is a positive linear relationship between teacher age and teacher overall level of satisfaction, was supported. The second hypothesis, that there is a positive linear relationship between the three age groups on the work, pay, supervision, co-worker, and promotion subscales of the Job Descriptive Index (JDI), was not supported. The teachers were grouped as follows: 30 years of age and

under, 31 to 50 years of age, and 51 years of age and older. A U-shaped relationship appeared for the subscales pay and supervision while a negative linear relationship evolved for the subscale promotion. Since satisfied teachers are reported to be more productive than dissatisfied teachers, providing motivation for teachers during years of low satisfaction should become more important to administrators.

Lowther et al. (1985), using data from three national studies, grouped teachers into three categories: below 35, 35-50, and 51 and over. Subsequent analysis of the data revealed that those teachers age 51 and over were the most satisfied with their jobs and those teachers under 35 were the least satisfied with their jobs. This same age pattern of teacher satisfaction was evident in all three studies.

The variable age has been included in several studies of job satisfaction specific to community college faculty (e.g., Chung, 1989; Hill, 1983; Tucker, 1990). The results reported in these studies varied. Chung (1989) reported that age did make a difference in the level of overall satisfaction among community college faculty. Chung (1989) grouped the faculty into four categories--30 or less, 31-40, 41-50, and 51 or more years of age. The mean job satisfaction score of each group was consistently higher than the preceding younger group. Statistically significant differences existed between the 30 or less age group and the

41-50 and the 51 or older age groups, the 31-40 age group and the 41-50 and the 51 or older age groups, and the 41-50 age group and the 51 and older age group. By contrast, in a study of full-time faculty in Oklahoma junior/community colleges, Hill (1983) reported no significant difference in the level of job satisfaction based on the age of the faculty members. Thus, these two studies among community college faculty have reported inconsistent results.

Gender and Job Satisfaction

Gender is a frequently included variable in job satisfaction research (e.g., Berman, 1979; Brawer, 1976; Buhmeyer & Hunt, 1982; Chung, 1989; Fedler, Counts, & Smith, 1984; Flaningam & Taylor, 1984; Hill, 1983; Hutton & Jobe, 1985; Kelly, 1989; McKee, 1991; McNeece, 1981; Reeves, 1991; Smith & Plant, 1982; Thoreson, Kardash, Leuthold, & Morrow, 1990). The findings presented in these numerous studies have been mixed. The results of some studies have reported male faculty to be more satisfied than female faculty while the results of other studies have reported female faculty to be more satisfied than the male faculty. Fedler et al. (1984), in a study of journalism and mass communication faculty, found that female assistant professors reported being more satisfied with the relationships they had with their colleagues and with the relationships they had with their students than were the male faculty. Female assistant

professors were, however, less satisfied with the promotions procedures than were the male assistant professors. At the associate professor level, females were less satisfied than males with their lives away from work, with their department chairs, with merit pay procedures, and with their colleagues (Fedler et al., 1984). In a similar study to that of Fedler's et al. (1984), McNeece (1981) reported that male faculty members were only slightly more satisfied with their jobs than were female faculty.

Smith and Plant (1982) in a study of sex differences and job satisfaction of university professors found that there was no difference between male and female faculty members on three Job Descriptive Index (JDI) variables--work, pay, and promotion. A significant difference between male and female professors was found for the variables supervision and co-workers. Male professors were found to be significantly more satisfied than were female professors on the two variables--supervision and co-workers (Smith & Plant, 1982). Thoreson et al. (1990), in a study of 23 matched pairs of male and female faculty from a major Midwestern university, reported that male faculty were significantly more satisfied than were female faculty on only one item--time for professional reading.

A number of researchers focusing specifically on community college faculty have included the variable gender

in their studies of job satisfaction (e.g., Brawer, 1976; Chung, 1989; Hill, 1983; Hutton & Jobe, 1985). The results of these studies have been mixed. Hill (1983) reported that gender does make a difference in regard to the level of faculty job satisfaction. As explained by Hill (1983), female faculty were less satisfied than male faculty on every dimension of work and significantly less satisfied on four dimensions--teaching, economics, convenience, and recognition-support. McKee (1991), in a study of community college faculty in West Virginia and Virginia, reported that male faculty were significantly less satisfied than female faculty on two job satisfaction variables--participation and extrinsic job satisfaction.

Hutton and Jobe (1985), in a study of 390 faculty from 14 Texas community colleges, reported that, overall, the female faculty were more satisfied than the male faculty. Both male and female faculty indicated satisfaction with teaching enjoyment, fairness in the use of departmental resources, student counseling and advisement, choice of profession, and availability of audio-visual materials and equipment. A difference existed with male faculty reporting the greatest satisfaction regarding access to library material and appreciation for the campus landscaping and maintenance. By contrast, the female faculty reported the greatest satisfaction in reference to working with

colleagues in a group and in satisfaction with their teaching or class assignment (Hutton & Jobe, 1985).

A number of investigators have reported no difference on the level of job satisfaction of community college faculty based on gender (e.g., Brawer, 1976; Chung, 1989; Hill, 1987). Brawer (1976), in a study of humanities instructors in two-year colleges, noted that the gender of the faculty member made little difference in their level of job satisfaction. Hill (1987), in a study of full-time faculty in Oklahoma junior/community colleges, reported no significant difference in the level of job satisfaction between male and female faculty members. Chung (1989) found no significant difference in the level of job satisfaction between male and female faculty in a study of staff from six community colleges located in the Southeastern U.S. The results of these three studies tend to indicate that the job satisfaction of community college faculty is not influenced by gender.

Education and Job Satisfaction

A large number of researchers have included the variable education in their studies of job satisfaction (e.g., Glenn & Weaver, 1982; Goodwin, 1969; Gordon & Avery, 1975; Gruenberg, 1980; King & Hautaluoma, 1987; King, Murray, & Atkinson, 1982; Klein & Maher, 1966; Martin & Shehan, 1989; Mottaz, 1984; Quinn & Baldi de Mandilovitch,

1980; Sulkin & Pranis, 1967; Wright & Hamilton, 1979). The findings of these studies concerning educational attainment and job satisfaction have resulted in mixed findings. A number of researchers have reported a positive relationship between education and job satisfaction (e.g., Glenn & Weaver, 1982; Goodwin, 1969; Martin & Shehan, 1989; Quinn & Baldi de Mandilovitch, 1980). Quinn and Baldi de Mandilovitch (1980) in an analysis of data from 11 studies of American workers reported a positive, significant relationship between a person's level of education and their overall job satisfaction. As reported by Quinn and Baldi de Mandilovitch (1980), the largest increase in overall job satisfaction occurred with the attainment of a college degree. The receipt of a degree was necessary for a college education to have a major effect on job satisfaction. X

Other researchers, by contrast, have reported a negative relationship between education and job satisfaction (e.g., Gruenberg, 1980; Klein & Maher, 1966; Sulkin & Pranis, 1967). Gruenberg (1980), in an analysis of data collected by the Survey Research Center at the University of Michigan, reported a negative relationship between education and job satisfaction. As noted by Gruenberg (1980), respondents who reported higher levels of intrinsic and extrinsic satisfaction had also reported lower levels of education while their counterparts with higher levels of

education reported lower levels of intrinsic and extrinsic satisfaction. The reported level of job satisfaction of respondents with higher levels of education tended to be less than those respondents who had attained lower levels of education.

Several researchers have investigated the relationship between education and job satisfaction among community college faculty (e.g., Hill, 1983; McBride et al., 1992; McKee, 1991; Milosheff, 1990). Hill (1983) reported that as the level of education increased among faculty members, their level of job satisfaction also increased. This relationship, while evident on all six dimensions of job satisfaction (economic, teaching, administration, associational, recognition-support, and convenience), was significant on four of the dimensions--teaching, economic, associational, and convenience (Hill, 1983). By contrast, Milosheff (1990) reported that the relationship between education and job satisfaction was not significant even at an alpha of .10. The results of these two studies suggest that the relationship between education and job satisfaction among community college faculty is likely to be mixed.

Years of Teaching in the Virginia Community College System

A comprehensive review of the job satisfaction literature revealed two studies which included the variable years of teaching experience in the Virginia Community

College System (e.g., McKee, 1991; Tucker, 1990). Tucker (1990) studied the relationship between the length of service in the Virginia Community College System and job satisfaction among full-time humanities and social science faculty. The results of the study indicated that the longer a faculty member had been employed in the system, the more dissatisfied they tended to be with their job. As noted by Tucker (1990), this condition was especially prevalent among the faculty who had been in Virginia Community College System for more than 20 years.

McKee (1991), in a study which involved faculty from four community colleges in West Virginia and 23 community colleges in Virginia, reported that the faculty who had been at the same institution for 15 years or more were significantly less satisfied with their jobs than the faculty who had been at the same institution for less than 15 years on three variables--participation, informed in job, and extrinsic job satisfaction. McKee (1991) also noted that the faculty with 15 or more years of experience represented the largest group at their respective institutions.

Full-time or Part-time and job satisfaction

An extensive review of the job satisfaction literature revealed a number of studies involving part-time faculty (e.g., Berman, 1979; Brawer, 1976; Burke, 1991; Casey, 1991;

Chung, 1989; Cowen, 1991; Feldman & Keidal, 1987; Flaningam & Taylor, 1984; Hayes, 1984; Hawkins, Bower, Fairchild, Koundakjian, & Simon, 1987; Inglis, 1992; Lundy & Warne, 1985; Morton & Newman, 1984; Murphy, 1980; Neely, 1982; Ramsden, 1983; Torpey, 1984; Williams & Wiatrek, 1986; Zink, 1991). Of these studies involving part-time faculty, only four compared the level of job satisfaction between full-time and part-time faculty (e.g., Berman, 1979; Burke, 1991; Chung, 1989; Williams & Wiatrek, 1986).

At the university level, Berman (1979) studied the job satisfaction of male and female, full-time and part-time faculty at the College Park Campus of the University of Maryland. A two-way analysis of variance revealed significant differences in the level of job satisfaction between full-time faculty and part-time faculty and male and female faculty. Full-time faculty were reported to be less satisfied with their work than the part-time faculty and female faculty were reported to be less satisfied with their work than were the male faculty. Berman (1979) reported that the part-time male faculty were the most satisfied with their jobs. Results from this study lends support to the notion that part-time faculty may indeed be more satisfied with their jobs than their full-time counterparts.

Williams and Wiatrek (1986), in a study of full-time and part-time faculty in speech and English departments in

three Texas community colleges, reported that, overall, the part-time faculty expressed significantly less satisfaction with their jobs than did the full-time faculty. Part-time faculty were significantly less satisfied with their jobs than full-time faculty on four of the five satisfaction subscales--rewards, co-workers, working situations, and supervisors. By contrast, the part-time faculty were more satisfied with their jobs than were the full-time faculty on the subscale organization (Williams & Wiatrek, 1986).

Chung (1989), in a study of full-time and part-time faculty from six community colleges in the Southeastern United States, reported that there was a significant difference between full-time and part-time faculty on the level of overall job satisfaction. Part-time faculty were significantly less satisfied than were the full-time faculty on the level of overall job satisfaction. Chung (1989), noted that this lower level of satisfaction may be the result of perceived isolation experienced by many of the part-time faculty.

Summary

There is little doubt that the phenomena of job satisfaction has been one of the most widely studied topics in the social sciences. In fact, a number of competing theories of job satisfaction have been proposed. Among the

most frequently noted theories are the expectancy, equity, need, and motivation-hygiene. The Motivation-Hygiene Theory proposed by Herzberg et al. (1959) was selected as the theoretical base for this study. Herzberg's et al. (1959) theory was selected because many researchers validated its use in educational settings. Further, the relationship between an array of independent variables and job satisfaction have been investigated. The independent variables investigated in this study include age, gender, education, years of teaching experience in the Virginia Community College System, and employment status (i.e., full-time or part-time).

Chapter 3

Research Methodology

The contents of this chapter describe the research design and the methodological procedures that were used to complete the study. Further, the participants are described; and the rationale for their selection is discussed. In addition, survey distribution and collection methods are presented as well as the statistical treatments of survey responses.

Research Design

An ex-post facto design was used. Ex-post facto designs are used to investigate the possible cause-and-effect relationships by observing existing consequences while searching for potential causal factors (Leedy, 1989). This design was selected for two reasons: (1) its ability to answer the questions under investigation and (2) its previous use by researchers to investigate the phenomena of job satisfaction among community college faculty (e.g., Hill, 1987).

Ex-Post Facto Methodology Critique

A review of ex-post facto methodology follows. The limitations and the strengths of this design are discussed.

Limitations

Kerlinger (1973) noted three limitations of ex-post facto research. The first limitation is the inability of the researcher to manipulate the independent variable or variables. In ex-post facto research, both the dependent and independent variables are observed. The independent variable or variables are observed before, after, or concurrent to the observation of the dependent variable. As a result, direct control of the independent variable or variables is not possible when using an ex-post facto design. This lack of control of the independent variable, and other possible independent variables, limits the confidence with which the truth of the hypothesized relationship between the dependent variable and the independent variable or variables can be expressed (Kerlinger, 1973).

A second limitation of ex-post facto research is the inability to randomize. Ideally, the researcher would be able to select a random sample of participants, randomly assign the participants to groups, and randomly assign treatments to groups. In ex-post facto research it is possible to assign participants to groups; but it is not possible to assign participants to groups at random or to assign treatments to groups at random. In ex-post facto research, the groups to which the participants are assigned

is uncontrollable by the researcher (Kerlinger, 1973). For example, the faculty who get assigned the status of full-time or part-time is not within the control of the researcher. These faculty members and their experiences come to the researcher already assigned to either the group full-time faculty or to the group part-time faculty.

The third limitation of ex-post facto research is the risk of improper interpretation. The danger of improper interpretation is due in part to the believability of many explanations of the results of the study. As noted by Kerlinger (1973), the acceptance of the first interpretation of the relationship between variables is easy especially if the research is unguided by hypotheses. Without research hypotheses, the researcher is likely to accept the first explanation of the phenomena under investigation that presents itself to the researcher. Ex-post facto research conducted without hypotheses and without predictions, is even more dangerous in its ability to mislead. When guided by hypotheses, the results of the study are more valid. The results are still weak, however, because they are based on chance relationships (Kerlinger, 1973).

Strengths

Despite the limitations, ex-post facto designs are frequently employed in social science and educational research. The reason for this use of ex-post facto designs

is best expressed by Kerlinger (1973) when he stated, "Despite its weaknesses, much ex-post facto research must be done in psychology, sociology, and education simply because many research problems in the social sciences and education do not lend themselves to experimental inquiry" (pp. 391-392). An ex-post facto design was used in this study because of its ability to answer the questions under investigation.

Participants

Dr. Elmo Roesler, Assistant Chancellor for Policy Studies, was contacted for permission to conduct the study in the Virginia Community College System. After a review of the research methodology and information requirements, Dr. Roesler granted the researcher permission to proceed with the study (Appendix B). A purposive sample of eight community colleges from across Virginia were selected to participate in this study. A purposive sample is a method of selection where the researcher develops a procedure of obtaining the sample. The eight community colleges in this study were selected because (1) they represent different geographic regions of Virginia, (2) they represent a wide variety of occupational-technical program areas, and (3) they range in size from small, rural single-campus colleges to large, urban, multi-campus institutions. Administrators

from these eight community colleges were sent a letter requesting their permission to proceed with the study (Appendix C). Of the eight community college administrators contacted, six agreed to allow their faculty to participate in the study. These six colleges were as follows: Blue Ridge Community College, Central Virginia Community College, J. Sargeant Reynolds Community College, John Tyler Community College, Mountain Empire Community College, and Piedmont Virginia Community College.

A list of the names and addresses of the occupational-technical faculty teaching during the Fall Semester 1993 was provided to the researcher by a representative from each of the participating community colleges. To run the data analysis, a return of 150 surveys was desired by the researcher. Since the expected rate of return was 60%, 250 (125 full-time and 125 part-time) occupational-technical faculty were selected to participate in the study. Due to rounding, the actual number of full-time and part-time occupational-technical faculty selected to participate in the study was 127 and 128 respectively. A procedure using a table of random numbers was devised to select the full-time and part-time occupational-technical faculty to participate in the study (Edwards, 1958). Table 1 provides a break down of the sample by number, percent, college, and employment status (i.e., full-time or part-time).

Table 1
Sample Selection by Community College

	Full-Time			Part-Time			Overall Sample
	Actual	%	Sample	Actual	%	Sample	
College 1	26	14.05	18	42	10.07	12	30
College 2	19	10.20	13	36	8.60	10	23
College 3	31	16.70	21	53	12.70	15	36
College 4	66	35.60	45	163	39.08	48	93
College 5	20	10.80	14	54	18.50	23	37
College 6	23	12.40	16	69	16.50	*20	*36
Total	185	100.0	127	417	100.0	*128	*255

Note: *Three packets were returned as undeliverable by the Postal Service. The intended recipients of these three packets were deleted from the sample.

Instrumentation

A discussion of the instrumentation used during the study is presented. The Data Form is described followed by a presentation of the survey instrument used during the study: Wood's Faculty Satisfaction/Dissatisfaction Scale.

Data Form

Each of the participants was asked to complete and return the Data Form (Appendix D). Respondents were asked to provide information regarding their gender, age on their last birthday, highest level of education, years of teaching experience in the Virginia Community College System, employment status (i.e., full-time or part-time), and number of classes/credit hours they were teaching during the semester.

Wood's Faculty Satisfaction/Dissatisfaction Scale

The Wood's Faculty Satisfaction/Dissatisfaction Scale was used because its theoretical base is Herzberg's et al. (1959) Motivation-Hygiene Theory. Further, the Wood's Faculty Satisfaction/Dissatisfaction Scale is applicable to a community college setting, and its test-retest reliability and construct validity has been previously certified. Wood (1973, 1976) developed the instrument using a sample of faculty from the North Carolina Community College System. Test-retest reliability coefficients for the composite scales ranged from .785 to .976. Construct validity was

determined by a panel of experts and factor analysis (Wood, 1973, 1976).

Participants were asked to respond to one question expressing their overall level of job satisfaction/dissatisfaction. Further, participants were requested to respond to 69 questions grouped into ten classifications based on factors from Herzberg's et al. (1959) Motivation-Hygiene Theory--achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions. These questions were arranged to form a 70-item Likert scale with six scoring categories. Participant response options were (1) very dissatisfied, (2) moderately dissatisfied, (3) slightly dissatisfied, (4) slightly satisfied, (5) moderately satisfied, and (6) very satisfied. Participants were also asked to respond to two open-ended questions. In one question, they were asked to describe the factors and situations which lead to their job satisfaction/dissatisfaction. In the other question, they were asked to discuss their reasons for teaching. The instrument was coded to facilitate follow-up activities. Each instrument was assigned a number which corresponded to the name of the person to whom the packet of survey materials had been sent.

To comply with the American Psychological Association's (1983) guidelines for avoiding nonsexist language, the Wood's Faculty Satisfaction/Dissatisfaction Scale was modified before being used to collect data regarding faculty job satisfaction/dissatisfaction. The modification involved changing the word "chairman" in item 25 in the original instrument to the word "chair" in the modified instrument. Item number 59 was also modified. The phrase "college-age students" in the original instrument was modified to read "college students." This change was made to avoid any confusion which might occur if the item was left to read college-age students.

Reliability of the Instrument

Cronbach's Alpha was used to determine the internal consistency of the ten job satisfaction factors. Cronbach's Alpha was also used to determine the internal consistency of the overall job satisfaction scores. The results of these reliability estimates are presented in Chapter 4.

Data Collection

Survey materials used in this study were distributed and collected by mail. The names and addresses of the participants were provided to the researcher by representatives from the community colleges involved in the

study. Steps in the data collection process included an initial survey distribution and a follow-up survey distribution resulting in a total of two survey mailings. Procedures for each mailing follow.

Initial Mailing

Each packet of survey materials contained a cover letter, statement of endorsement, Data Form, survey instrument, and postage paid, self-addressed envelope. The cover letter briefly explained the purpose of the study, informed the participants that the instrument was coded to facilitate follow-up activities, and assured the confidentiality of responses. The initial mailing of survey materials took place on Wednesday, September 29, 1993. The cover letter appears in Appendix F and a sample statement of endorsement appears in Appendix H.

Follow up Mailing

A second packet of materials was sent to participants whose responses had not been received by noon on Wednesday, October 20, 1993. Each follow-up packet contained a revised cover letter, Data Form, survey instrument, and postage paid, self-addressed envelope. The revised cover letter assured confidentiality and encouraged participation. This first follow-up packet of materials was mailed on Wednesday, October 20, 1993. The response rates, as a result of these

mailings, appear in Chapter 4. The revised cover letter appears in Appendix G.

Treatment of the Data

A restatement of the purpose of the study and the research questions follow. The statistical procedures used to analyze each research question are also presented.

Restatement of the Purpose and Research Questions

The two-fold purpose of the study was (1) to determine the level of job satisfaction among occupational-technical faculty in relation to ten factors based on Herzberg's et al. (1959) Motivation-Hygiene Theory and (2) to determine the relative difference in job satisfaction between full-time and part-time occupational-technical faculty in the Virginia Community College System.

Specifically, answers to the following questions were sought:

1. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System?
2. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System?
3. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia

Community College System on the level of job satisfaction?

4. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
5. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
6. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
7. What proportion of the variance in the level of job satisfaction on the mean of the summation of the ten

job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, working conditions, and overall satisfaction (item 70) is explained by the following participant characteristics:

- a. gender
- b. age
- c. level of education
- d. years of teaching experience in the Virginia Community College System
- e. employment status (i.e., full-time or part-time)

Data Analysis Procedures

An a priori alpha for all tests of significance was set at .05. Specific statistical analyses related to each research question were as follows:

1. The mean, standard deviation, and frequency distribution were used to determine the level of satisfaction among the full-time occupational-technical faculty.
2. The mean, standard deviation, and frequency distribution were used to determine the level of satisfaction among the part-time occupational-technical faculty.

3. The overall F-value of a MANOVA model, Hotelling-Lawley Trace, was used to determine if there was a difference between full-time and part-time occupational-technical faculty on the level of job satisfaction among the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory.
4. Means, standard deviations, and frequency distributions were used to determine the level of satisfaction of the full-time occupational-technical faculty on each of the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory.
5. Means, standard deviations, and frequency distributions were used to determine the level of job satisfaction of the part-time occupational-technical faculty on each of the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory.
6. Bonferoni's protected-F post hoc procedure, as outlined by Stevens (1992), was used to determine if differences existed between full-time and part-time occupational-technical faculty on each of the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory.

7. A multiple regression model, following the procedure recommended by Hinkle and Oliver (1986), was constructed to describe the relationship between selected demographic variables and the level of job satisfaction.

Summary

This chapter reviewed the research methodology used during the study. The participants were described and the rationale for their selection discussed. Survey distribution and collection methods were presented. Statistical treatments of survey responses were addressed.

Chapter 4

Results of the Study

This chapter presents the results of the methodological procedures described in Chapter 3. The first section examines response rates by community college. The second section reports the nonrespondent analysis. The third section presents demographic data collected from responses to the Data Form and describes the sample. The fourth section presents information related to the reliability of the job satisfaction instrument used during the study. Finally, the results of analysis procedures relating to each research question are presented.

Survey Response Rates

Data collection procedures were detailed in Chapter 3. Briefly, there were two steps in the process: (1) an initial mailing and (2) a follow-up mailing. Each returned survey was coded according to when it was received during the collection process. Three packets were returned by the Postal Service as undeliverable. The intended recipients of these three packets were deleted from the sample, yielding a total of 252 possible participants.

A total of 178 (70.6%) out of a possible 252 surveys was returned. One survey was returned unusable. The 177 usable returns (70.2%) provided the data used in the

analysis in this study. The return rate for the full-time occupational-technical faculty was 78.6% (n=99) while the return rate for the part-time occupational-technical faculty was 62.4% (n=78). A breakdown of the survey returns by community college, number, percentage, and employment status (i.e., full-time or part-time) is presented in Table 2.

Table 2
 Survey Response Rate
 by Community College

	Full-Time Returned		Part-Time Returned		Overall Returned	
	n	Rate %	n	Rate %	n	Rate %
College 1	15	83.3	9	75.0	24	80.0
College 2	12	92.3	7	70.0	19	82.6
College 3	16	76.2	12	80.0	28	77.8
College 4	*32	68.9	25	52.1	*57	60.2
College 5	12	85.7	13	56.5	25	67.6
College 6	<u>13</u>	<u>81.3</u>	<u>12</u>	<u>70.6</u>	<u>25</u>	<u>69.4</u>
Total	*100	79.4	78	62.4	*178	70.6

Note: *Denotes one unusable return

Nonrespondent Analysis

An approach to compare the characteristics of early respondents with those of late respondents was used. The purpose of this procedure was to compare characteristics of the early respondents with those of the late respondents to determine if the two groups differed significantly. As noted by Miller and Smith (1983), late respondents are often similar to nonrespondents. To justify generalizing from the respondents to the sample, an approach which compares the characteristics of the early respondents with those of the late respondents can be used. If no differences occur, it is assumed that the respondents represent an unbiased sample. If differences do occur, applications of the research findings have to be limited to the respondents.

T-tests were used to compare the characteristics of the early respondents (the first 25%) with those of the late respondents (the last 25%). The t-tests were used to determine if the early respondents differed significantly from the late respondents on two characteristics: age and years of teaching experience in the Virginia Community College System. These two characteristics were selected because they have been reported to influence job satisfaction. Chapter 2 contains an expanded discussion of these two variables.

This procedure was repeated twice--once for the full-time occupational-technical faculty and once for the part-time occupational-technical faculty. The procedure was repeated because the majority of early respondents (22 of the first 25) were full-time occupational-technical faculty. This condition likely occurred due to the limited amount of time part-time occupational-technical faculty spend on campus. The results of the t-tests produced no significant difference between early and late responding full-time occupational-technical faculty on either variable at alpha = .05. Further, no significant difference was found between the early and late responding part-time occupational-technical faculty on the variable age. There was, however, a significant difference between early and late responding part-time occupational-technical faculty on the variable years of teaching experience in the Virginia Community College System. Therefore, interpretation of the results beyond the participating part-time occupational-technical faculty must be done with caution. The results of these t-tests appear in Table 3.

Table 3
Comparison of Characteristics of Early Respondents
with those of Late Respondents

Variable	n	Mean	Standard Deviation	t-value	p-value
Age/Full-Time					
First 25%	25	48.60	5.831	1.644	.107
Last 25%	25	45.52	7.332		
Years Teaching/Full-Time					
First 25%	25	14.68	6.933	0.388	.700
Last 25%	25	13.92	6.916		
Age/Part-Time					
First 25%	20	44.55	5.831	0.085	.985
Last 25%	20	44.60	6.824		
Years Teaching/Part-Time					
First 25%	20	7.25	4.854	2.082	.044*
Last 25%	20	4.50	3.364		

*Significant at alpha = .05

Demographic Data

Participant responses to Data Form items were used to describe the sample. These responses were also used to determine relationships between demographic variables and the level of satisfaction.

Gender

There were 177 responses to the item gender. Table 4 provides a complete breakdown of the respondents by gender, percentage, and employment status (i.e., full-time or part-time).

Age

A total of 173 participants responded to the item age on the Data Form. A complete breakdown of these responses by number, percentage, and employment status (i.e., full-time or part-time) are presented in Table 5. Overall, the youngest participant reported an age of 26 while the oldest participant reported an age of 68.

Level of Education

There were 177 responses to this item. The level of education reported by participants ranged from the high school diploma through the doctoral degree. Table 6 provides a breakdown of responses by number, percentage, and employment status (i.e., full-time or part-time).

Table 4
Gender Distribution

	Full-Time		Part-Time		Overall	
	n	%	n	%	n	%
Male	56	56.6	46	59.0	102	57.6
Female	43	43.4	32	41.0	75	42.4
Total	99	100.0	78	100.0	177	100.0

Table 5
Age Distribution

	Full-Time		Part-Time		Overall	
	n	%	n	%	n	%
26-28	1	1.0	3	3.8	4	2.3
29-31	1	1.0	4	5.1	5	2.8
32-34	2	2.0	5	6.4	7	4.0
35-37	7	7.1	7	9.0	14	7.9
38-40	8	8.1	9	11.5	17	9.6
41-43	8	8.1	14	17.9	22	12.4
44-46	20	20.2	14	17.9	34	19.2
47-49	14	14.1	8	10.3	22	12.4
50-52	17	17.2	4	5.1	21	11.9
53-55	8	8.1	4	5.1	12	6.8
56-58	6	6.1	3	3.8	9	5.1
59-61	3	3.0	0	0.0	3	1.7
62-64	1	1.0	1	1.3	2	1.1
65-67	0	0.0	0	0.0	0	0.0
68-70	0	0.0	1	1.3	1	0.6
No Response	3	3.0	1	1.3	4	2.3
Total	99	100.0	78	100.0	177	100.0

Table 6
Highest Level of Education

Degree	Full-Time		Part-Time		Overall	
	n	%	n	%	n	%
High School	1	1.0	6	7.7	7	4.0
Postsecondary Certificate or Diploma	1	1.0	3	3.8	4	2.3
Associates	2	2.0	6	7.7	8	4.5
Bachelors	20	20.2	21	26.9	41	23.2
Masters	54	54.5	34	43.6	88	49.7
Educational Specialist/CAGS	10	10.1	0	0.0	10	5.6
Doctorate	11	10.7	8	10.3	19	10.7
Total	99	100.0	78	100.0	177	100.0

Years of Teaching Experience in the Virginia Community College System

The years of teaching experience in the Virginia Community College System reported by participants ranged from one to 27. The years of teaching experience reported by full-time occupational-technical faculty ranged from one to 27. By comparison, the years of teaching experience reported by the part-time occupational-technical faculty ranged from one to 16. Table 7 provides a breakdown of responses by number, percentage, and employment status (i.e., full-time or part-time).

Table 7
 Years of Teaching Experience in the
 Virginia Community College System

	Full-Time		Part-Time		Overall	
	n	%	n	%	n	%
1-2	7	7.1	22	28.2	29	16.4
3-4	7	7.1	18	23.1	25	14.1
5-6	7	7.1	14	17.9	21	11.9
7-8	4	4.0	8	10.3	12	6.8
9-10	9	9.1	5	6.4	14	7.9
11-12	9	9.1	2	2.6	11	6.2
13-14	6	6.1	6	7.7	12	6.8
15-16	11	11.1	2	2.6	13	7.3
17-18	13	13.1	0	0.0	13	7.3
19-20	11	11.1	0	0.0	11	6.2
21-22	7	7.1	0	0.0	7	4.0
23-24	5	5.1	0	0.0	5	2.8
25-26	1	1.0	0	0.0	1	0.6
27-28	1	1.0	0	0.0	1	0.6
No Response	<u>1</u>	<u>1.0</u>	<u>1</u>	<u>1.0</u>	<u>2</u>	<u>1.1</u>
Total	99	100.0	78	100.0	177	100.0

Survey Reliability

Cronbach's Alpha was used to determine the internal consistency of the ten factors of the Wood's Faculty Satisfaction/Dissatisfaction Scale. These reliability coefficients, presented in Table 8, ranged from 0.761 to 0.965. Cronbach's Alpha was also used to determine the internal consistency of the overall job satisfaction scores. Results indicated a reliability coefficient of .976 for this scale.

Table 8
 Cronbach's Alpha Reliability Coefficients for the ten
 factors of the
 Wood's Faculty Satisfaction/Dissatisfaction Scale

Scale	Number of Items	Reliability Coefficient
Achievement	7	.816
Growth	7	.896
Interpersonal Relations	8	.913
Policy and Administration	8	.935
Recognition	5	.927
Responsibility	6	.870
Salary	6	.946
Supervision	11	.965
The Work Itself	5	.761
Working Conditions	6	.840
Overall Satisfaction Score	70	.976

Data Analysis

Seven research questions were explored (1) to determine the level of job satisfaction among occupational-technical faculty in relation to ten factors based on Herzberg's et al. (1959) Motivation-Hygiene Theory and (2) to determine the relative difference of job satisfaction between full-time and part-time occupational-technical faculty in the Virginia Community College System.

Specifically, answers to the following questions were sought:

1. What is the level of job satisfaction among full-time occupational technical faculty in the Virginia Community College System?

The mean, standard deviation, and frequency distribution were used to determine the level of satisfaction among the full-time occupational-technical faculty in the Virginia Community College System.

The overall level of job satisfaction for full-time faculty was reported at a mean (standard deviation) of 4.179 (0.853). Further, 23.2% of the full-time occupational-technical faculty reported a mean level of satisfaction between 1 and 3.5 while 76.7% reported a mean of between 3.6 to 6. Table 9 provides a breakdown of the mean, standard deviation, and range of the level of satisfaction for the full-time occupational-technical faculty. Table 10 provides

a breakdown of the frequency distribution for the mean level of satisfaction of the full-time occupational-technical faculty.

2. What is the level of job satisfaction among part-time occupational technical faculty in the Virginia Community College System?

The mean, standard deviation, and frequency distribution were used to determine the level of satisfaction among the part-time occupational-technical faculty in the Virginia Community College System.

The overall level of job satisfaction for part-time faculty was reported at a mean (standard deviation) of 4.575 (0.809). Further, 10.3% of the part-time occupational-technical faculty reported a mean level of satisfaction between 1 and 3.5 while 89.7% reported a mean level of satisfaction between 3.6 and 6. Table 9 provides a breakdown of the mean, standard deviation, and range of the level of satisfaction for the part-time occupational-technical faculty. Table 10 provides a breakdown of the frequency distribution for the mean level of satisfaction of the part-time occupational-technical faculty.

Table 9
Level of Satisfaction

Faculty	Mean	Standard Deviation	Range
All Faculty	4.354	0.854	1.286 - 5.957
Full-Time Faculty	4.179	0.853	1.286 - 5.871
Part-Time Faculty	4.575	0.809	2.400 - 5.957

Table 10

Frequency Distribution for Level of Satisfaction
Full-Time/Part-Time Occupational-Technical Faculty

Status	Mean Frequency/Percent					
	1-1.5	1.6-2.5	2.6-3.5	3.6-4.5	4.6-5.5	5.6-6
Full-Time	1 (1.0%)	1 (1.0%)	21 (21.2%)	39 (39.4%)	34 (34.3%)	3 (3.0%)
Part-Time	0 (0.0%)	1 (1.3%)	7 (9.0%)	22 (28.2%)	37 (47.4%)	11 (14.1%)

3. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction.

The overall F-value of a MANOVA model, Hotelling-Lawley Trace, was used to determine if a difference existed between full-time and part-time occupational-technical faculty on the level of satisfaction among the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory. Results of the MANOVA analysis, Hotelling-Lawley Trace, $F = 3.2$, $p = 0.0001$ indicated that the difference between full-time and part-time occupational-technical faculty was significant at $\alpha = .05$. The full-time occupational-technical faculty reported a lower level of satisfaction than did the part-time occupational-technical faculty.

4. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?

Means, standard deviations, and frequency distributions were used to determine the level of satisfaction of the full-time occupational-technical faculty on each of the ten

factors of Herzberg's et al. (1959) Motivation-Hygiene Theory.

Presented in Table 11 are the means and standard deviations of the ten job satisfaction factors for full-time occupational-technical faculty. These means (standard deviations) ranged from a low of 3.067 (1.365) for the factor salary to a high of 5.182 (0.752) for the factor the work itself. The lowest level of satisfaction was reported for the factor salary with 59.6% of the full-time faculty reporting a mean level of satisfaction between 1 and 3.5 while 40.4% of the full-time faculty reported a mean level of satisfaction between 3.6 and 6. The highest level of satisfaction was reported for the factor the work itself with 2% of the full-time faculty reporting a mean level of satisfaction between 1 and 3.5 while 98% of the full-time faculty reported a mean level of satisfaction between 3.6 and 6. Table 12 provides a frequency distribution breakdown of the ten satisfaction/satisfaction factors for the full-time occupational-technical faculty.

5. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration,

recognition, responsibility, salary, supervision, the work itself, and working conditions?

Means, standard deviations, and frequency distributions were used to determine the level of satisfaction of the part-time occupational-technical faculty on each of the ten satisfaction/dissatisfaction factors.

Presented in Table 11 are the means and standard deviations of the ten job satisfaction factors for part-time faculty. These means (standard deviations) ranged from a low of 3.312 (1.559) for the factor salary to a high of 5.310 (0.607) for the factor the work itself. A complete breakdown of the means and standard deviations for the ten satisfaction factors appear in Table 10. The lowest level of satisfaction was reported for the factor salary with 50.0% of the part-time occupational-technical faculty reporting a mean level of satisfaction between 1 and 3.5 while 50.0% of the part-time occupational-technical faculty reported a mean level of satisfaction between 3.6 and 6. The highest level of satisfaction was reported for the factor the work itself with 100.0% of the part-time occupational-technical faculty reporting a mean level of satisfaction between 3.6 and 6. Table 13 provides a frequency distribution breakdown of the ten satisfaction/dissatisfaction factors for the part-time occupational-technical faculty.

Table 11
Satisfaction/Dissatisfaction Factors

Factor	Full-Time Mean/SD	Part-Time Mean/SD	Overall Mean/SD
Achievement	4.727 (0.785)	5.007 (0.656)	4.851 (0.743)
Growth	3.693 (1.141)	3.681 (1.309)	3.687 (1.214)
Interpersonal Relations	4.774 (0.948)	5.130 (0.801)	4.931 (0.902)
Policy and Administration	3.769 (1.254)	4.313 (1.153)	4.008 (1.237)
Recognition	4.119 (1.226)	4.336 (1.279)	4.215 (1.250)
Responsibility	4.421 (1.110)	4.972 (0.913)	4.664 (1.061)
Salary	3.067 (1.347)	3.312 (1.559)	3.175 (1.445)
Supervision	4.107 (1.365)	4.917 (1.060)	4.464 (1.290)
The Work Itself	5.182 (0.752)	5.310 (0.607)	5.238 (0.693)
Working Conditions	3.997 (1.094)	4.491 (1.081)	4.215 (1.113)

Table 12

Frequency Distribution Satisfaction/Dissatisfaction
Factors for Full-Time Occupational-Technical Faculty

Factor	Mean Frequency/Percent					
	1-1.5	1.6-2.5	2.6-3.5	3.6-4.5	4.6-5.5	5.6-6
AC	1 (1.0%)	2 (2.0%)	4 (4.0%)	22 (22.2%)	57 (57.6%)	13 (13.1%)
GR	7 (7.1%)	8 (8.1%)	23 (23.2%)	37 (37.4%)	21 (21.2%)	3 (3.0%)
IR	1 (1.0%)	3 (3.0%)	5 (5.1%)	19 (19.2%)	48 (48.5%)	23 (23.2%)
PA	7 (7.1%)	10 (10.1%)	16 (16.2%)	35 (35.4%)	23 (23.2%)	8 (8.1%)
RN	2 (2.0%)	12 (12.1%)	14 (14.1%)	27 (27.3%)	34 (34.3%)	10 (10.1%)
RY	1 (1.0%)	6 (6.1%)	9 (9.1%)	29 (29.3%)	35 (35.4%)	19 (19.2%)
SA	15 (15.2%)	22 (22.2%)	22 (22.2%)	21 (21.2%)	16 (16.2%)	3 (3.0%)
SU	4 (4.0%)	13 (13.1%)	12 (12.1%)	23 (23.2%)	29 (29.3%)	18 (18.2%)
WI	1 (1.0%)	0 (0.0%)	1 (1.0%)	12 (12.1%)	42 (42.4%)	43 (43.4%)
WC	1 (1.0%)	8 (8.1%)	19 (19.2%)	35 (35.4)	26 (26.3%)	10 (10.1%)

AC = Achievement
GR = Growth
IR = Interpersonal relations
PA = Policy and administration
RN = Recognition

RY = Responsibility
SA = Salary
SU = Supervision
WI = The work itself
WC = Working conditions

Table 13

Frequency Distribution Satisfaction/Dissatisfaction
Factors for Part-Time Occupational-Technical Faculty

Factor	Mean Frequency/Percent					
	1-1.5	1.6-2.5	2.6-3.5	3.6-4.5	4.6-5.5	5.6-6
AC	0 (0.0%)	0 (0.0%)	3 (3.0%)	12 (15.4%)	47 (60.3%)	16 (20.5%)
GR	3 (3.0%)	14 (17.9%)	17 (21.8%)	21 (26.9%)	16 (20.5%)	7 (9.0%)
IR	0 (0.0%)	1 (1.3%)	2 (2.6%)	10 (12.8%)	30 (38.5%)	35 (44.9%)
PA	1 (1.3%)	6 (7.7%)	9 (11.5%)	21 (26.9%)	25 (32.1%)	16 (20.5%)
RN	3 (3.8%)	7 (9.0%)	5 (6.4%)	20 (25.6%)	29 (37.2%)	14 (17.9%)
RY	0 (0.0%)	1 (1.3%)	5 (6.4%)	11 (14.1%)	34 (43.6%)	27 (34.6%)
SA	10 (12.8%)	16 (20.5%)	13 (16.7%)	18 (23.1%)	11 (14.1%)	10 (12.8%)
SU	0 (0.0%)	2 (2.6%)	9 (11.5%)	8 (10.3%)	30 (38.5%)	29 (37.2%)
WI	0 (0.0%)	0 (0.0%)	0 (1.0%)	10 (12.8%)	33 (42.3%)	35 (44.9%)
WC	0 (0.0%)	3 (3.8%)	10 (12.8%)	20 (25.6%)	27 (34.6%)	18 (23.1%)

AC = Achievement
GR = Growth
IR = Interpersonal relations
PA = Policy and administration
RN = Recognition

RY = Responsibility
SA = Salary
SU = Supervision
WI = The work itself
WC = Working conditions

6. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions.

Bonferoni's Protected-F post hoc procedure was used to determine if differences existed between full-time and part-time occupational-technical faculty on each of the ten satisfaction/dissatisfaction factors.

The results of these post hoc tests are presented in Table 14. Examination of Table 14 reveals significant differences between full-time and part-time occupational-technical faculty on four of the ten factors: policy and administration, responsibility, supervision, and working conditions. In each of the four cases, the part-time occupational-technical faculty were more satisfied than were the full-time occupational-technical faculty.

Table 14

Univariate-F Post Hoc Tests for Difference Between
Full-Time and Part-Time Occupational-Technical
Faculty on each of the Satisfaction/Dissatisfaction Factors

Source	df	Sum of Squares	Mean Squares	F Value	P>F
Achievement	1	3.422	3.422	6.40	.0123
Error	175	93.632	0.535		
Total	176	97.054			
Growth	1	0.005	0.005	0.00	.9511
Error	175	259.481	1.483		
Total	176	259.486			
Interpersonal Relations	1	5.523	5.523	7.03	.0088
Error	175	137.566	0.786		
Total	176	143.089			
Policy and Administration	1	12.890	12.890	8.79	.0034*
Error	175	256.566	1.466		
Total	176	269.456			
Recognition	1	2.049	2.049	1.31	.2535
Error	175	273.153	1.561		
Total	176	275.202			

* Significant using Bonferoni's Protected-F ($.05/10 = .005$)

Table 14
(continued)

Univariate-F Post Hoc Tests for Difference Between
Full-Time and Part-Time Occupational-Technical
Faculty on each of the Satisfaction/Dissatisfaction Factors

Source	df	Sum of Squares	Mean Squares	F Value	P>F
Responsibility	1	13.262	13.262	12.55	.0005*
Error	175	184.987	1.057		
Total	176	198.149			
Salary	1	2.611	2.611	1.25	.2648
Error	175	365.127	2.086		
Total	176	367.738			
Supervision	1	28.675	28.675	18.99	.0000*
Error	175	264.285	1.510		
Total	176	292.960			
The Work Itself	1	0.720	.720	1.50	.2217
Error	175	83.739	.479		
Total	176	84.459			
Working Conditions	1	10.682	10.682	9.02	.0031*
Error	175	207.327	1.185		
Total	176	218.009			

* Significant using Bonferoni's Protected-F (.05/10 = .005)

7. What proportion of the variance in the level of job satisfaction on the mean of the summation of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, working conditions, and overall satisfaction (item 70) is explained by the following participant characteristics:

- a. gender
- b. age
- c. level of education
- d. years of teaching experience in the Virginia Community College System
- e. employment status (i.e., full-time or part-time)

A multiple regression model was constructed to describe the relationship between selected demographic variables and the level of satisfaction. A modified version of the four step procedure for analyzing a regression model with continuous and categorical variables as outlined by Hinkle and Oliver (1986) was followed. Prior to analysis, a correlation matrix was constructed (Appendix I) to aid in the detection of multicollinearity. Variables included in the matrix were gender, age, education, years of teaching experience in the Virginia Community College System, employment status (i.e., full-time or part-time) and level

of satisfaction. Since there is no agreement in the literature as to what constitutes high multicollinearity, or multicollinearity for that matter, all the independent variables were left in the regression model (Pedhazur, 1982; Pedhazur & Schmelkin, 1991).

In order to detect the presence of curvilinear relationships between the level of satisfaction and the continuous demographic variables, each continuous demographic variable and its square was regressed on the level of satisfaction. The demographic variable was entered into the equation followed by the entry of the square of the demographic variable. If the t-value associated with the square of the demographic variable is significant, then the relationship between the level of satisfaction and the demographic variable is curvilinear (Pedhazur & Schmelkin, 1991). The relationship between the number of years of teaching experience in the Virginia Community College System and the level of satisfaction was found to be curvilinear. A visual inspection of a scatterplot of the years of teaching experience in the Virginia Community College System and the level of satisfaction revealed the presence of an outlier (years of teaching experience in the Virginia Community College System was reported to be 27 with a mean level of satisfaction of 1.286). This outlier was filtered from the data and the regression was rerun to determine if

the relationship between the years of teaching experience in the Virginia Community College System and the level of satisfaction was still curvilinear. With the outlier filtered from the data, the relationship between the years of teaching experience in the Virginia Community College System and the level of satisfaction was found to be linear. Thus, the alternative noted by Pedhazur (1982) of deleting troublesome outliers from the regression was followed.

Due to the low or nonexistent responses to the level of education in several categories, for the purpose of analysis, participant responses were grouped as follows: (1) reference group = high school, postsecondary certificate or diploma, and associate's degree; (2) dum 1 = bachelor's degree; (3) dum = 2 master's degree; (4) dum = 3 educational specialist/CAGS and doctoral degree. The regression model explained the proportion of variance in satisfaction scores with age, gender, education (dum 1 - dum 3), years of teaching experience in the Virginia Community College System, and employment status (i.e., full-time or part-time). Results of the analysis are reported in Table 15. The total model explained 11.53% of the variance in satisfaction scores. Status and dum 3 were the only variables which explained a significant proportion of the variance in satisfaction scores.

When a dummy variable is significant, as in this case, Hinkle and Oliver (1986) state that the more important question is whether there is a significant relationship between the dependent variable and the different levels of the categorical variable. To determine if the level of education was a significant contributor in explaining the proportion of variance in satisfaction scores, a second regression model was constructed with the variables age, gender, years of teaching experience in the Virginia Community College System, and employment status (i.e., full-time or part-time). An F change test was then computed to determine if a combination of the different levels of education were significant contributors in explaining the proportion of variance in satisfaction scores. The result of this test, $F = 3.74$, $df = 3, 170$, was significant and indicated that the level of education was a significant contributor in explaining the proportion of variance in satisfaction scores after controlling for the other variables in the regression model. About 5.84% of the variance in the job satisfaction of participating occupational-technical faculty was explained by the level of education. Table 15 summarizes the results for the full model. Table 16 summarizes the for the reduced model.

Table 15
Multiple Regression Summary
Full Model

Source	df	SS	MS	F	P-value
Regression	7	13.15404	1.879148	3.02	0.005
Error	162	100.9495	0.623145		
Total	169	114.1035			

Estimate	b-value	SE	T	p-value
Intercept	4.3047	0.4912		
Status	- 0.3098	0.1521	-2.04	0.0486*
Gender	0.1479	0.0892	1.13	0.2600
Age	0.0140	0.1324	1.53	0.1287
Years of teaching	0.0001	0.0123	0.01	0.9930
D1	0.0137	0.2291	0.06	0.9523
D2	- 0.4002	0.2174	-1.84	0.0675
D3	- 0.5206	0.2544	-2.05	0.0424*

R Squared = .1153 *Significant at .05

Note: b values are partial regression coefficients.

Reference group = high school, postsecondary certificate or diploma, associate's degree

Dum 1 = bachelor's degree

Dum 2 = master's degree

Dum 3 = educational specialist/CAGS and doctoral degree

Table 16
Multiple Regression Summary
Reduced Model

Source	df	SS	MS	F	P-value
Regression	4	6.4898	1.622448	2.49	0.045
Error	165	107.6137	0.652204		
Total	169	114.1035			
Estimate		b-value	SE	T	p-value
Intercept		4.4464	0.4694		
Status		- 0.3598	0.1528	-2.35	0.0197*
Gender		0.1039	0.1275	0.82	0.4160
Age		0.0088	0.0092	0.96	0.3387
Years of teaching		0.0049	0.0122	-0.40	0.6864

R Squared = .0569 *Significant at .05

Note: b values are partial regression coefficients.

Theme Analysis

A theme analysis of participant written responses was conducted. The purpose of this analysis was to determine which factors of the job contribute to the satisfaction/dissatisfaction of the full-time and part-time occupational-technical faculty. Written responses were evaluated as to which question/factor of the Wood's Faculty Satisfaction/Dissatisfaction Scale the comments most closely resembled. Comments were further sorted as to whether they contributed to satisfaction or to dissatisfaction. The results of this theme analysis is presented next.

Although participant responses varied, the largest number of comments focusing on the job satisfaction of both full-time and part-time occupational-technical faculty were in the area of the work itself. Both full-time and part-time occupational-technical faculty indicated that working with students, seeing students grow, and the challenges associated with teaching were important contributors to their job satisfaction.

By contrast, the bulk of comments from both full-time and part-time occupational-technical faculty which contributed to job dissatisfaction revolved around the activities and duties which interfered with working with students, seeing students grow, and the challenges associated with teaching. Commonly noted areas of concern

were the excessive paperwork, the heavy workload, the layers of bureaucracy, and the excessive committee work. An other source of dissatisfaction among full-time and part-time occupational-technical faculty was the opportunity for growth. Comments from full-time and part-time occupational-technical faculty revolved around the lack of opportunities for in-service education, the lack of opportunities to teach a wider variety of courses, the lack of a career ladder, and the lack of recognition of growth opportunities by working with industry as apposed to the accumulation of graduate credits.

Interpretation and application of the above theme analysis must be done with caution. Not all of the participating full-time and part-time occupational-technical faculty wrote comments. Further, the comments extracted in the above analysis where not made ^{by} a majority of the full-time and part-time occupational-technical faculty. The above mentioned areas of concern were, however, deemed important enough to be included in the analysis of the data in this Chapter and the discussion and recommendations section presented in Chapter 5.

Summary

The contents of this chapter reviewed the results of the data analysis procedures delineated in Chapter 3. The first section described the response rates by community

college. The second section portrayed the demographic data collected from the respondents. The third section presented information related to the reliability of the instrument used during the study. Finally, the results of procedures relating to each research question were introduced.

Chapter 5

Discussion and Recommendations

This chapter is divided into six sections. The first section reviews the purpose of the study and research methods. The second section reviews the findings. The third section presents the conclusions. The fourth section provides a discussion of the literature, research questions, and findings. The fifth section delineates recommendations for local and state level administrators responsible for supervising full-time and part-time occupational-technical faculty in the Virginia Community College System. The sixth section presents recommendations for future research.

Review of the Purpose and Research Methods

The purpose of this study was (1) to determine the level of job satisfaction among the occupational-technical faculty in relation to ten factors based on Herzberg's et al. (1959) Motivation-Hygiene Theory and (2) to determine the relative difference of job satisfaction between full-time and part-time occupational-technical faculty in the Virginia Community College System. Specific research questions which guided the selection of the methodological procedures follow:

1. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System?
2. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System?
3. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction?
4. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
5. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?

6. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?
7. What proportion of the variance in the level of job satisfaction on the mean of the summation of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, working conditions, and overall satisfaction (item 70) is explained by the following participant characteristics:
 - a. gender
 - b. age
 - c. level of education
 - d. years of teaching experience in the Virginia Community College System
 - e. employment status (i.e., full-time or part-time)

Survey distribution and collection was accomplished through the mail. Initially, 255 (127 full-time and 128

part-time) randomly selected occupational-technical faculty were mailed a packet of survey materials. Included in the packet of materials were a Data Form and a modified version of the Wood's Faculty Satisfaction/Dissatisfaction Scale. The Data Form was used to collect information regarding participant gender, age, level of education, years of teaching experience in the Virginia Community College System, and employment status (i.e., full-time or part-time). The Wood's Faculty Satisfaction/Dissatisfaction Scale was used to collect data regarding participant satisfaction.

A total of 178 (100 full-time and 78 part-time) occupational-technical faculty returned the survey. One response from a full-time occupational-technical faculty participant was unusable. Of the remaining 177 responses, 99 and 78 were from full-time and part-time occupational-technical faculty respectively. The data provided by these 177 participants was analyzed using the statistical package Number Cruncher (version 5.03).

Faculty responses to the Wood's Faculty Satisfaction/Dissatisfaction Scale comprised the scores for the ten factors of Herzberg's et al. (1959) Motivation-Hygiene Theory and one score rating overall satisfaction. Means, standard deviations, and frequency distributions were used to analyze questions one, two, four, and five. A MANOVA

model was used to analyze questions three and six. Multiple regression was used to determine the proportion of variance in the level of satisfaction explained by selected demographic variables.

Review of the Findings

The research questions will serve as the framework for reviewing the findings.

1. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System?

The full-time occupational-technical faculty reported a mean level of satisfaction of 4.179. Further, 23.2% of the full-time occupational-technical faculty reported a mean level of satisfaction between 1 and 3.5 while 76.7% reported a mean level of satisfaction between 3.6 to 6.

2. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System?

The part-time occupational-technical faculty reported a mean level of satisfaction of 4.575. Further, 10.3% of the part-time occupational-technical faculty reported a mean level of satisfaction between 1 and 3.5 while 89.7% report a mean level of satisfaction between 3.6 and 6.

3. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction?

Results of the Hotelling-Lawley Trace, $F = 3.2$, $p = 0.0001$ indicated that the difference in the level of satisfaction between full-time and part-time occupational-technical faculty in the Virginia Community College System was significant at $\alpha = .05$.

4. What is the level of job satisfaction among full-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?

The means for the ten satisfaction/dissatisfaction factors among the full-time occupational-technical faculty ranged from a low of 3.067 for the factor salary to a high of 5.182 for the factor the work itself. The lowest level of satisfaction was reported for the factor salary with 59.6% of the full-time faculty reporting a mean level of satisfaction between 1 and 3.5 while 40.4% of the full-time faculty reported a mean level of satisfaction between 3.6 and 6. The highest level of satisfaction was reported for

the factor the work itself with 2% of the full-time occupational-technical faculty reporting a mean level of satisfaction between 1 and 3.5 while 98% of the full-time occupational-technical faculty reported a mean level of satisfaction between 3.6 and 6.

5. What is the level of job satisfaction among part-time occupational-technical faculty in the Virginia Community College System on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?

The means for the ten satisfaction/dissatisfaction factors among the part-time occupational-technical faculty ranged from a low of 3.312 for the factor salary to a high of 5.310 for the factor the work itself. The lowest level of satisfaction was reported for the factor salary with 50.0% of the part-time occupational-technical faculty reported a mean level of satisfaction between 1 and 3.5 while 50.0% of the part-time occupational-technical faculty reported a mean level of satisfaction between 3.6 and 6. The highest level of satisfaction was reported for the factor the work itself with 100% of the part-time faculty reporting a mean level of satisfaction between 3.6 and 6.

6. Is there a difference between full-time and part-time occupational-technical faculty in the Virginia Community College System on the level of job satisfaction on each of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, and working conditions?

Bonferoni's Protected-F post hoc procedure was used to determine if differences existed between full-time and part-time occupational-technical faculty on each of the ten satisfaction/dissatisfaction factors. The results of these post hoc tests revealed significant differences between full-time and part-time occupational-technical faculty on four of the ten factors: policy and administration, responsibility, supervision, and working conditions. In each case, the part-time faculty were more satisfied than were the full-time faculty.

7. What proportion of the variance in the level of job satisfaction on the mean of the summation of the ten job satisfaction factors: achievement, growth, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision, the work itself, working conditions, and overall

satisfaction (item 70) is explained by the following participant characteristics:

- a. gender
- b. age
- c. level of education
- d. years of teaching experience in the Virginia Community College System
- e. employment status (i.e., full-time or part-time)

A multiple regression model was constructed to describe the relationship between selected demographic variables and the level of satisfaction. The full model, gender, age, Level of education (dum 1, dum 2, dum 3), years of teaching experience in the Virginia Community College System, and employment status (i.e., full-time or part-time) explained 11.53% of the variance in satisfaction scores. Status and the level of education were the only variables explaining a significant proportion of the variance in satisfaction scores at 4.86% and 5.84% respectively.

Conclusions and Discussion

The findings of this study were organized around seven research questions, each probing a different aspect of job satisfaction among the full-time and part-time occupational-technical faculty in the Virginia Community College System.

A general discussion of the findings, the limitations of the study, the conclusions, and the literature follows.

Several factors limit the results of study. One, the sample of full-time and part-time occupational-technical faculty participating in this study was not a probability sample. As a result, the participating faculty may not necessarily be representative of the occupational-technical faculty in the Virginia Community College System. Two, the nonrespondent analysis revealed that among the part-time occupational-technical faculty, the early respondents differed significantly from the late respondents. Thus, interpretation of the results beyond the participating part-time occupational-technical faculty must be done with caution. Three, although analysis of written comments revealed several themes, not all of the participating faculty wrote comments and the themes which emerged must be interpreted with caution. Despite these limitations, several conclusions were formulated. These conclusions and a related discussion are presented in the next section.

Conclusion One

Both the full-time and part-time occupational-technical faculty participating in this study were generally satisfied with their jobs. In recent years, a number of studies have investigated the job satisfaction of full-time community college faculty. The bulk of these studies have reported

moderate to high levels of satisfaction among full-time community college faculty (e.g., Benoit & Smith, 1980; Chung, 1989; Hill, 1983; Hill, 1986; Hill 1987; Hutton & Jobe, 1985; McBride et al., 1992; McKee, 1991; Milosheff, 1990). Benoit and Smith (1980) for instance, in their study of the job satisfaction of full-time community college faculty, reported that 95% were either satisfied or very satisfied with their jobs. A moderate to high level of satisfaction among full-time community college faculty was also reported by Milosheff (1990) when she stated ". . . that on average, community college faculty are satisfied with their jobs. This study does support the generally high level of job satisfaction reported in other studies involving community college faculty" (p.17). *and*

The findings of the current study are in congruence with the previous studies of job satisfaction involving full-time community college faculty. The full-time occupational-technical faculty in this study reported a mean level of satisfaction of 4.179, a moderately high level of satisfaction. A review of the written comments made by the full-time occupational-technical faculty revealed that they received a great deal of satisfaction from classroom teaching and working with students. The major component of their job which reduced satisfaction revolved around the lack of time to adequately prepare for teaching and working

with students. Their collective sentiments can best be expressed through the comments of one full-time occupational-technical participant: "Basically, I would like my job⁴ lot more if it wasn't for all the directives, reports, meetings, and other administrative duties that come down from above. . . . I have little time to concentrate on my teaching."

Several researchers have investigated the phenomena of job satisfaction among part-time community college faculty (e.g., Chung, 1989; Morton & Newman, 1984; Ramsden, 1983; Williams & Wiatrek, 1986; Zink, 1991). The findings of these studies have been mixed. Morton and Newman (1984), Ramsden (1983), and Zink (1991) reported moderate to high levels of satisfaction among the part-time faculty in their respective studies. Chung (1989), by contrast reported somewhat different results. In the Chung (1989) study, the percentage of part-time faculty reporting high, medium, and low levels of satisfaction was 42%, 29%, and 29% respectively.

The results of this study are in agreement with the findings of Morton and Newman (1984), Ramsden (1983), and Zink (1991) in that the part-time occupational-technical faculty were generally satisfied with their jobs. By contrast, the results of the current study refute the findings of Chung (1989). This lack of agreement with the

Chung (1989) findings may be the result of the low return rate experienced by Chung (1989) in his study. Only 20% of the part-time community college faculty selected to participate in the study returned a survey. These part-time respondents may have been among the least satisfied and, as a result, were willing to go the extra mile to return the survey. By contrast, over 62% of the part-time occupational-technical faculty returned a complete survey in this study.

Like the full-time occupational-technical faculty, the part-time occupational-technical faculty derived a large amount of satisfaction from teaching and interacting with students. In fact, the bulk of comments from the part-time occupational-technical faculty revolved around what a pleasure it was for them to be able to teach and to make a positive contribution to society. The part-time occupational-technical faculty did express concern with the limited advance notice they received before being assigned a class. A number of the part-time occupational-technical faculty were apprehensive about not being able to adequately prepare of a class on such short notice.

Conclusion Two

The part-time occupational-technical faculty were statistically more satisfied with their jobs than were the full-time occupational-technical faculty. A few researchers

have compared the level of satisfaction between full-time and part-time community college faculty (e.g., Chung, 1989; Williams & Wiatrek, 1986). Chung (1989), for example, studied the job satisfaction of the full-time and part-time community college faculty in the Southeastern U.S. In his study, Chung (1989) found that the full-time faculty reported a significantly higher level of satisfaction than did the part-time faculty. In a similar study of full-time and part-time faculty, Williams and Wiatrek (1986) found that the full-time faculty reported a significantly higher level of overall satisfaction than did the part-time faculty. Despite the finding that the full-time faculty reported significantly higher levels of satisfaction than did the part-time faculty, it should be noted that in the Williams and Wiatrek (1986) study both full-time and part-time faculty reported moderate to high levels of satisfaction. The findings of the current study contradict those of the Chung (1989) and Williams and Wiatrek (1986) studies. In this study the part-time occupational-technical faculty were significantly more satisfied than were the full-time occupational-technical faculty. It should be noted, however, that the actual proportion of variance explained by status (e.g., full-time or part-time) was small, about 4.86%. Further, both the full-time and part-time occupational-technical faculty reported moderately high

levels of satisfaction. Therefore, the relatively small proportion of variance explained by status may not reflect practical significance.

Conclusion Three

With the exception of salary and growth, both the full-time and part-time occupational-technical faculty participating in this study were generally satisfied with the ten satisfaction/dissatisfaction factors of job satisfaction. Few studies have investigated the job satisfaction of full-time community college faculty on various facets of satisfaction (e.g., Hill, 1986). As stated by Hill (1986), "A perusal of the literature on the job satisfaction of community college faculty members reveals that most are generally satisfied with their jobs, but many are said to be relatively dissatisfied with certain aspects of their jobs" (p.1). In his study, Hill (1986) explored five facets of job satisfaction among full-time community college faculty: work, supervision, co-workers, pay, and promotion. The results of the Hill (1986) study suggested that the level of satisfaction with work, promotion, and co-workers were significant in explaining an individual's commitment to a community college. The results of the present study are similar to those of the Hill (1986) study in that the full-time faculty, though generally satisfied with their jobs, expressed different levels of

satisfaction with the various factors of Herzberg's et al. (1959) Motivation-Hygiene Theory.

The full-time occupational-faculty in this study reported the highest level of satisfaction with the factor the work itself. This finding is consistent with the Hill (1986) finding that work is a contributor to satisfaction among full-time community college faculty. As a result, it may behoove local and state level administrators to cultivate a high level of satisfaction for the work itself among the full-time occupational-technical faculty (i.e., teaching and working with students). This cultivation of the work itself should result in increased commitment among the full-time occupational-technical faculty.

Since few researchers have investigated job satisfaction among part-time community college faculty, even fewer studies exist regarding part-time community college faculty and their level of satisfaction among various job facets (e.g., Ramsden, 1983; Williams & Wiatrek, 1986; Zink, 1991). In both the Ramsden (1983) and Zink (1991) studies, part-time faculty reported moderately high levels of satisfaction. However, when Ramsden (1983) and Zink (1991) examined the level of satisfaction on intrinsic and extrinsic facets of job satisfaction, both researchers found that the part-time faculty reported a higher level of satisfaction with the intrinsic facets of their jobs.

The results of this study are similar to the findings of Ramsden (1983) and Zink (1991) in that the highest level of satisfaction was reported for the work itself an intrinsic facet of the job and the lowest level of satisfaction was reported for the factor salary an extrinsic facet of the job. Written responses from part-time occupational-technical faculty revealed that they derive much satisfaction from teaching, working with students, sharing their experience, and watching students grow. As one part-time occupational-technical participant put it, "I was hooked after my first graduation." Both teaching and working with students are intrinsic components of Herzberg's et al. (1959) factor the work itself.

Conclusion Four

The part-time occupational-technical faculty were statistically more satisfied with four factors of their jobs--policy and administration, responsibility, supervision, and working conditions than were the full-time occupational-technical faculty. Review of the literature revealed only one study (Williams & Wiatrek, 1986) which compared the job satisfaction of full-time and part-time community college faculty on various facets of job satisfaction. In their study, Williams and Wiatrek (1986) compared the level of satisfaction between full-time and part-time faculty on five facets of job satisfaction--

working conditions, co-workers, organization, supervisors, and rewards. The full-time faculty reported significantly higher levels of satisfaction than did the part-time faculty on four of the five facets--working conditions, co-workers, supervisors, and rewards.

The results of the current study disagree with the findings of Williams and Wiatrek (1986). In the present study the part-time occupational-technical faculty reported significantly higher levels of satisfaction on four of ten satisfaction/ dissatisfaction factors--policy and administration, responsibility, supervision, and working conditions than did their full-time occupational-technical counterparts.

One possible explanation for this difference between the two studies may be a result of the faculty involved. In the Williams and Wiatrek (1986) study the faculty were teaching in speech and English specialties where in the current study the faculty were teaching in occupational-technical disciplines. In any case, a visual inspection of the means revealed differences between full-time and part-time occupational-technical faculty which may not necessarily be of practical significance. Of the four factors where a statistically significant difference existed, only the difference between full-time and part-time occupational-technical faculty on the factor supervision may

be of practical significance. About 9.79% of the variance in supervision was explained by status (i.e., full-time or part-time).

One tenable explanation for the satisfaction differences between full-time and part-time occupational-technical faculty may be due to the number of years of teaching experience in the Virginia Community College System reported by each group. More than 85% of the part-time occupational-technical faculty report ten or fewer years of teaching experience in the Virginia Community College System. By contrast, over 64% of the full-time occupational-technical faculty reported over ten years of teaching experience in the Virginia Community College System. This explanation would be in congruence with the findings of Tucker (1990) and McKee (1991) who reported in their studies, involving community college faculty from Virginia, that the longer the faculty member had been in system the lower their reported level of satisfaction.

Recommendations for Local and State Level Administrators

The findings of this study, theme analysis, pertinent literature served as the basis for the following recommendations for local and state level administrators responsible for supervising full-time and part-time

occupational-technical faculty in the Virginia Community College System.

1. This study provides a base for additional research of the job satisfaction of the full-time occupational-technical faculty in the Virginia Community College System. It is recommended that local and state level administrators responsible for supervising full-time and part-time occupational-technical faculty plan for the periodic assessment of satisfaction so that areas of least satisfaction can be identified and explored with the intent of improving satisfaction in those areas.
2. The findings show that both full-time and part-time occupational-technical faculty in the Virginia Community College System derive much satisfaction from the work itself. It is recommended that community college administrators provide both full-time and part-time occupational-technical faculty with adequate time and resources to prepare for teaching and interaction with students. Both of these facets of the work itself are likely to be key elements in maintaining the satisfaction of the full-time and part-time occupational-technical faculty in the Virginia Community College System.

3. As became evident through the data analysis, both full-time and part-time occupational-technical faculty reported low levels of satisfaction in the area of growth. It is recommended that alternative approaches of enhancing growth opportunities for both full-time and part-time occupational-technical faculty be explored and implemented. These activities would be especially important for increasing the level of satisfaction among the part-time occupational-technical faculty, since in this study, the ratio of part-time to full-time occupational-technical faculty was 2.25:1. Improved opportunities for growth, however, should result in improved service and commitment to the students and to the community colleges by both groups of faculty.

Recommendations for Future Research

The results of this study served as a basis for the following recommendations for additional study.

1. The continued study of job satisfaction among full-time and part-time occupational-technical faculty in the Virginia Community College System would be useful in determining any changes in the level of satisfaction over time.

2. A study using a probability sample of all full-time and part-time occupational-technical faculty in the Virginia Community College System teaching during a selected semester is recommended to determine if the results are comparable to those of this study.
3. Future studies should seek to increase the explanation of variance in the level of satisfaction among full-time and part-time occupational-technical faculty in the Virginia Community College System. This increase in explaining variance could be accomplished during the variable specification process.
4. Additional studies should explore the factors in which the full-time and part-time occupational-technical faculty differed significantly (i.e., policy and administration, responsibility, supervision, and working conditions). Indepth qualitative analysis of faculty interviews should provide insight in explaining the differences between full-time and part-time occupational-technical faculty in the Virginia Community College System on these factors of satisfaction. This insight should be useful in developing strategies for improving faculty satisfaction in areas where disparity exists.
5. A similar study of the job satisfaction among full-time and part-time occupational-technical faculty should be

conducted in other states to determine if the results from the current study are comparable to those of community college systems in those states.

Summary

The contents of this chapter included a summary of the purpose of the study and research methods followed by a review of the findings. Conclusions were presented as well as a discussion of the results. Recommendations for local and state level supervisors of full-time and part-time occupational faculty in the Virginia Community College System and for future research were delineated.

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APPENDICES

APPENDIX A:

**Letter from Dr. Wood granting the researcher
permission to use his job satisfaction scale**



ASHEVILLE-BUNCOMBE TECHNICAL COMMUNITY COLLEGE

540 Victoria Road
Asheville, NC 28801
Telephone: (704) 254-1921
FAX: (704) 251-6355

February 16, 1993

Mr. Allen D. Truett
Marketing Education
Virginia Tech
131 Lane Hall
Blacksburg, VA 24061


Dear Mr. Truett:

I am granting permission for you to use my Faculty Job Satisfaction-Dissatisfaction Scale for your dissertation research in your study of the occupation-technical faculty in the Virginia Community College System.

I am also granting permission for you to make several modifications as appropriate. My only expectation is appropriate credit for use of my materials. A copy of your abstract would be appreciated.

Best wishes with your research!

Sincerely,


Olin R. Wood, Vice President
Instructional Services

ORW/rw

APPENDIX B:

Letter from Dr. Roesler granting the researcher
permission to proceed with the study



Office of the Vice President for Academic Affairs

June 23, 1973

Mr. Allen D. Truell
Division of Vocational and
Technical Education
Virginia Polytechnic Institute
and State University
131 Lane Hall
Blacksburg, VA 24061

Dear Mr. Truell:

I have reviewed your study methodology and information requirements for your doctoral study entitled *Job Satisfaction of Occupational-Technical Faculty in the Virginia Community College System*.

The purpose of the study is to determine the level of job satisfaction among occupational-technical faculty in relation to ten factors based on Herzberg's Motivation-Hygiene Theory and to determine if differences in job satisfaction exist between part-time and full-time faculty. I understand your data collection effort will take place during the fall semester 1973.

You expect the results of your study to accomplish the following:

"The results of the study will provide state and local community college administrators with insight into the job satisfaction of both full-time and part-time occupational-technical faculty. This insight will assist them in developing programs to increase the job satisfaction, productivity, and commitment of their occupational-technical faculty."

Because your dissertation should have results of interest to administrators and faculty in the System, you are authorized to proceed with your study. Your next step is to contact the presidents of the twenty-three (23) colleges and ask them to agree to participate in your study. This step is necessary because of the resources it takes to have college administrators and faculty support your study.

Mr. Allen D. Truell
June 22, 1993
Page 2

Please keep me informed about the progress of your study. When it is completed, I would like at least two copies of your dissertation and any abstracts or special writings which you might want to share with all the Virginia community colleges.

Let me know if there are any additional questions about your contacts with the colleges.

Sincerely,



Elmo D. Roesler
Assistant Chancellor
for Policy Studies

EDR:ba

- c Dr. Arnold R. Oliver, Chancellor
- Dr. Roy Flores, Executive Vice Chancellor
- Dr. Anne-Marie McCartan, Vice Chancellor
for Academic Services and Research

APPENDIX C:

**Letter to community college presidents requesting
permission to proceed with the study**

Date

Dear Personalized:

I am planning a dissertation study of the job satisfaction of the occupational-technical faculty in the Virginia Community College System. The purpose of the study is (1) to determine the level of job satisfaction among the occupational-technical faculty in relation to ten factors based on Herzberg's Motivation-Hygiene Theory and (2) to determine if differences in job satisfaction exist between part-time and full-time faculty. Dr. Elmo D. Roesler, Assistant Chancellor for Policy Studies as reviewed my study methodology and information requirements and has authorized me to proceed with the study.

As a first step in this process, I am asking your permission to allow the occupational-technical faculty in your community college to participate in the study. The faculty will be asked to take about 15 minutes to complete a job satisfaction survey. The data collection will take place during the fall semester. In addition, I'll need the following information from your college:

- * The names of the full-time occupational-technical faculty who will be teaching during the fall semester. The list should be broken down by campus and Hegis Codes (5000-5599).
- * The names and addresses of the part-time occupational-technical faculty who will be teaching during the fall semester. These addresses may be either their home addresses or their school addresses. The list should be broken down by campus and Hegis Codes (5000-5599). The list of part-time occupational-technical faculty should be further limited to those persons who are teaching credit courses.
- * A statement endorsing my study from an appropriate representative from your college (e.g., president, provost, or division chair).

If you should need additional information regarding my proposed study, feel free to call me at (703) 231-5191 or (703) 231-7719. I'll be contacting you soon to discuss the details of the study further. I look forward to receiving your support of this important study.

Sincerely,

Alien D. Truell

cc: Dr. Elmo D. Roesler, Assistant
Chancellor for Policy Studies

APPENDIX D:

Data Form

COMMUNITY COLLEGE FACULTY JOB SATISFACTION SURVEY

DATA FORM

INSTRUCTIONS:

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

1. Gender: Male _____ Female _____
2. Age on last birthday _____
3. Highest level of education
_____ 1. High school
_____ 2. Postsecondary certificate or diploma
_____ 3. Associate degree
_____ 4. Bachelor's degree
_____ 5. Master's degree
_____ 6. Educational Specialist degree/CAGS
_____ 7. Doctoral degree
_____ 8. Other (please specify) _____
4. Number of years of teaching experience in the Virginia Community College System (on your last anniversary date) _____
5. Employment status: _____ part-time _____ full-time
6. Number of classes and credit hours you are teaching this semester.
Number of classes _____ Number of credit hours _____

APPENDIX E:

Modified Wood's Faculty Satisfaction/Dissatisfaction Scale

WOOD'S FACULTY SATISFACTION/DISSATISFACTION SCALE

INSTRUCTIONS:

For each of the following items, circle the response which best represents your level of job satisfaction or dissatisfaction. Please be sure to respond to ALL items.

SCALE:

- | | |
|----------------------------------|-------------------------------|
| 1 = Very dissatisfied (VD) | 4 = Slightly satisfied (SS) |
| 2 = Moderately dissatisfied (MD) | 5 = Moderately satisfied (MS) |
| 3 = Slightly dissatisfied (SD) | 6 = Very satisfied (VS) |

ACHIEVEMENT

	VD	MD	SD	SS	MS	VS
1. The actual achievement of work-related goals.	1	2	3	4	5	6
2. The immediate results from your work.	1	2	3	4	5	6
3. The actual adoption of practices which you recommend.	1	2	3	4	5	6
4. Personal goal attainment.	1	2	3	4	5	6
5. Students follow the practices being taught.	1	2	3	4	5	6
6. Observing students' growth and success over a period of time.	1	2	3	4	5	6
7. The extent to which you are able objectively to evaluate your accomplishment.	1	2	3	4	5	6

GROWTH

8. Opportunities for increased responsibility in education.	1	2	3	4	5	6
9. Opportunities provided for growth in education compared with growth in other fields.	1	2	3	4	5	6
10. Participation in in-service education.	1	2	3	4	5	6
11. Types and levels of in-service education.	1	2	3	4	5	6
12. Opportunities to grow professionally through formal education.	1	2	3	4	5	6

SCALE:

- 1 = Very dissatisfied (VD) 4 = Slightly satisfied (SS)
 2 = Moderately dissatisfied (MD) 5 = Moderately satisfied (MS)
 3 = Slightly dissatisfied(SD) 6 = Very satisfied (VS)

	<u>VD</u>	<u>MD</u>	<u>SD</u>	<u>SS</u>	<u>MS</u>	<u>VS</u>
13. Opportunities to attend professional conferences, workshops, etc.	1	2	3	4	5	6
14. Opportunities for research.	1	2	3	4	5	6

INTERPERSONAL RELATIONS

15. The level of understanding that your superiors and you have of each other.	1	2	3	4	5	6
16. Friendliness of your co-workers.	1	2	3	4	5	6
17. Cooperation from faculty in your department.	1	2	3	4	5	6
18. Cooperation from faculty outside your department.	1	2	3	4	5	6
19. Faculty-student relationships.	1	2	3	4	5	6
20. Overall institutional relations including faculty, students, and staff.	1	2	3	4	5	6
21. Professional relationships on the job.	1	2	3	4	5	6
22. Personal relationships on the job.	1	2	3	4	5	6

POLICY AND ADMINISTRATION

23. Your involvement in making decisions.	1	2	3	4	5	6
24. The extent to which you are informed about matters affecting you.	1	2	3	4	5	6
25. The procedures used to select faculty for promotion to positions such as department chair.	1	2	3	4	5	6
26. The extent to which administrative policies and procedures are made available to the faculty.	1	2	3	4	5	6
27. The administrative procedures used to carry out the educational program.	1	2	3	4	5	6

SCALE:

- 1 = Very dissatisfied (VD) 4 = Slightly satisfied (SS)
 2 = Moderately dissatisfied (MD) 5 = Moderately satisfied (MS)
 3 = Slightly dissatisfied (SD) 6 = Very satisfied

	<u>VD</u>	<u>MD</u>	<u>SD</u>	<u>SS</u>	<u>MS</u>	<u>VS</u>
28. The extent to which administrative policies and procedures are actually followed.	1	2	3	4	5	6
29. The extent to which the policies meet faculty needs.	1	2	3	4	5	6
30. The educational philosophy which prevails in your institution.	1	2	3	4	5	6

RECOGNITION

31. Recognition of your accomplishments by co-workers.	1	2	3	4	5	6
32. Recognition of your accomplishments by superiors.	1	2	3	4	5	6
33. Your recognition compared to that of your co-workers.	1	2	3	4	5	6
34. The recognition you get from the administration for your ideas.	1	2	3	4	5	6
35. Publicity given to your work and activities.	1	2	3	4	5	6

RESPONSIBILITY

36. The number of classes or groups for which you are responsible.	1	2	3	4	5	6
37. The authority you have to get the job done.	1	2	3	4	5	6
38. The total amount of responsibility you have.	1	2	3	4	5	6
39. Your responsibilities compared with those of your co-workers.	1	2	3	4	5	6
40. Committee responsibilities.	1	2	3	4	5	6
41. Responsibilities outside your major areas of interest.	1	2	3	4	5	6

SCALE:

- 1 = Very dissatisfied (VD) 4 = Slightly satisfied (SS)
 2 = Moderately dissatisfied (MD) 5 = Moderately satisfied (MS)
 3 = Slightly dissatisfied (SD) 6 = Very satisfied (VS)

<i>SALARY</i>	<u>VD</u>	<u>MD</u>	<u>SD</u>	<u>SS</u>	<u>MS</u>	<u>VS</u>
42. The method used to determine your salary.	1	2	3	4	5	6
43. The range of salaries paid to instructors in your institution.	1	2	3	4	5	6
44. The top salary available to instructors compared to similar positions in other professions.	1	2	3	4	5	6
45. Your salary compared to that of people with similar training in other professions.	1	2	3	4	5	6
46. The amount of your salary.	1	2	3	4	5	6
47. The earning potential of the faculty compared to that of the administration.	1	2	3	4	5	6
 <i>SUPERVISION</i>						
48. On-the-job supervision given by your superior.	1	2	3	4	5	6
49. Competence of your superiors to give leadership.	1	2	3	4	5	6
50. Personal encouragement given by your superior.	1	2	3	4	5	6
51. The willingness of your superior to delegate authority.	1	2	3	4	5	6
52. Authority delegated compared to duties delegated.	1	2	3	4	5	6
53. Counsel and guidance given by your superiors.	1	2	3	4	5	6
54. The initiation of innovations by your superiors.	1	2	3	4	5	6
55. The fairness of your superiors.	1	2	3	4	5	6
56. The sensitivity of your superiors to your needs.	1	2	3	4	5	6

SCALE:

- 1 = Very dissatisfied (VD) 4 = Slightly satisfied (SS)
 2 = Moderately dissatisfied (MD) 5 = Moderately satisfied (MS)
 3 = Slightly dissatisfied (SD) 6 = Very satisfied (VS)

	<u>VD</u>	<u>MD</u>	<u>SD</u>	<u>SS</u>	<u>MS</u>	<u>VS</u>
57. The consistency of your superiors.	1	2	3	4	5	6
58. Specific on-the-job training offered by your superior.	1	2	3	4	5	6
<i>THE WORK ITSELF</i>						
59. Work and association with college students.	1	2	3	4	5	6
60. The degree to which you work with an advisory committee to do your job.	1	2	3	4	5	6
61. The interesting and challenging aspects of teaching.	1	2	3	4	5	6
62. The general type of work you do.	1	2	3	4	5	6
63. Your level of enthusiasm about teaching.	1	2	3	4	5	6
<i>WORKING CONDITIONS</i>						
64. The number of hours you work each week.	1	2	3	4	5	6
65. Your work schedule compared to that of similar positions in other fields.	1	2	3	4	5	6
66. Your office facilities.	1	2	3	4	5	6
67. The adequacy of instructional equipment.	1	2	3	4	5	6
68. The number of course preparations required.	1	2	3	4	5	6
69. Your work schedule compared to that of your co-workers.	1	2	3	4	5	6
<i>OVERALL JOB SATISFACTION</i>						
70. Consider all aspects of your job as an instructor and indicate your overall level of job satisfaction or dissatisfaction.	1	2	3	4	5	6

71. Please describe the factors and/or situations which contribute to your job satisfaction/dissatisfaction.

72. Please describe your reasons for teaching. _____

Please check to make sure you have responded to **ALL** items.
Thank you for participating in this survey.

RETURN TO:

Allen D. Truell
Virginia Tech
131 Lane Hall
Blacksburg, VA 24061-0254

CODE: _____

APPENDIX F:

First Letter to Occupational-Technical Faculty

Date

Dear Personalized:

Although the importance of continually monitoring the job satisfaction of community college faculty appears widely in the literature, little research has been conducted focusing specifically on the job satisfaction of occupational-technical faculty. The purpose of this study is to determine the level of job satisfaction among occupational-technical faculty and to determine if differences in job satisfaction exist between part-time and full-time occupational-technical faculty. The results of this study will be of value to administrators at both the local and state levels in developing programs to enhance faculty job satisfaction. This study has been endorsed by Dr. Elmo Roesler, Assistant Chancellor for Policy Studies, and by your college's administration (see enclosed memo).

I would appreciate your completing and returning the enclosed questionnaire by Friday, October 15, 1993. The questionnaire will take about 15 minutes to complete. A postage paid, self-addressed envelope has been enclosed for your convenience in returning the questionnaire. A summary of the results will be made available to you through your college's administration.

As a participant in this study, you may be assured of complete confidentiality. The questionnaire has been numbered for follow up purposes only. This number will be checked off my mailing list when your questionnaire is returned. Your name will never appear on the questionnaire.

I appreciate your participation in this exciting project, and look forward to hearing from you. Your cooperation and support in assisting with this study, which is aimed at helping community colleges, is needed. Feel free to write or call me at (703) 231-5191 if you have any questions.

Sincerely,

Allen D. Truell
Principal Investigator

APPENDIX G:
Second Letter to Occupational-Technical Faculty

Date

Dear Personalized:

About three weeks ago I wrote to you regarding your job satisfaction as an occupational-technical faculty member in the VCCS. As of today I have not received your completed questionnaire.

As you are now aware, references to the job satisfaction of community college faculty appear frequently in the literature. It is for this reason that, I believe, my study has been endorsed by Dr. Elmo Roesler, Assistant Chancellor for Policy Studies VCCS, and your community college's administration.

I am writing to you again because of the significance each questionnaire has to the results of the study. Your name was selected from a list of full-time and part-time occupational-technical faculty sent to me by a representative from your community college. Only 256 full-time and part-time occupational-technical faculty were selected to participate in this study.

As a participant in this study, you may be assured of complete confidentiality. The questionnaire has been numbered for follow up purposes only. This number will be checked off my mailing list when your questionnaire is returned. Your name will never appear on the questionnaire.

For your convenience, I have enclosed a replacement questionnaire and return envelope. Your cooperation in completing and returning this questionnaire by Friday, November 5, 1993 would be appreciated. Feel free to call me at (703) 231-5191 if you have any questions.

Sincerely,

Allen D. Truell
Principal Investigator


APPENDIX H:

Sample Statement of Endorsement



MEMORANDUM

TO: Full- and Part-time Occupational Technical Faculty

FROM: S. A. Burnette 

DATE: August 16, 1993

SUBJECT: Job Satisfaction Survey

Mr. Allen D. Truell of Virginia Tech will be conducting a dissertation study of the job satisfaction of the occupational technical faculty in the Virginia Community College System. The purpose of the study is to determine the level of job satisfaction in relation to ten factors based on Herzberg's Motivation-Hygiene theory and to determine if differences in job satisfaction exist between part-time and full-time faculty.

The VCCS and our Executive Committee have endorsed this study.

I am endorsing this project and asking that you complete the job satisfaction survey that you receive during the fall semester from Mr. Truell. It should take about 15 minutes to complete the survey.

Thank you in advance for your cooperation.

APPENDIX I
Correlation Matrix

Correlation Matrix

	LS	ST	GR	AG	YT	ED
LS	1.000	- 0.220	0.054	- 0.002	- 0.134	0.268
ST		1.000	0.005	0.258	0.574	0.286
GR			1.000	- 0.150	- 0.120	0.294
AG				1.000	0.478	0.285
YT					1.000	0.377
ED						1.000

LS = Level of Satisfaction

ST = Status

GR = Gender

AG = Age

YT = Years of teaching experience

ED = Education

VITA

Allen D. Truell
341 Winston Ave.
Blacksburg, VA 24060


Allen Dean Truell was born in Newport, New Hampshire on May 8, 1960. Allen grew up in Croydon, New Hampshire and attended Croydon and Newport public schools. In 1990, he graduated summa cum laude from New Hampshire College with a Bachelor of Science in marketing education. Allen continued his education by attending Bowling Green State University in Bowling Green, Ohio. In August of 1991 he completed the Master of Education degree in business education.

In the fall of 1991, Allen enrolled at Virginia Polytechnic Institute and State University (Virginia Tech) where he began his doctoral program in vocational and technical education. While attending Virginia Tech, he concentrated in marketing education and received the Certificate of Advanced Graduate Studies in May of 1993. He completed the requirements for the Doctor of Philosophy degree in May of 1994.

Allen's work experience is diversified. Over the years, and while putting himself through school, he has worked as a carpenter, as a substitute teacher, as a graduate assistant, and, most recently, as graduate teaching assistant at Virginia Tech. During his three years as a graduate teaching assistant, Allen taught two courses Human

Relations in the Workplace and Small Business Operations, supervised student teachers, supervised business interns as well as performing a host of other duties.

In addition, Allen is a member of a number of professional organizations including the American Vocational Association, Association of Marketing Education Students, Marketing Education Association, National DECA, Virginia Association of Marketing Educators, Virginia DECA, and the Virginia Vocational Association. Over the years, he has also been invited to join a number of honor societies including Delta Mu Delta, Delta Pi Epsilon, Phi Delta Kappa, Pi Omega Pi, and Omicron Tau Theta.



Allen D. Truell