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An Assessment of Personal Characteristics, Job Satisfaction and Semantic Descriptors of Virginia Acute and Tertiary Care Hospitals' Chief Executive Officers

Justin C. Matus
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**AN ASSESSMENT OF PERSONAL CHARACTERISTICS, JOB SATISFACTION AND
SEMANTIC DESCRIPTORS OF VIRGINIA ACUTE AND TERTIARY CARE
HOSPITALS' CHIEF EXECUTIVE OFFICERS**

by

**Justin C. Matus
B.S., King's College, 1981
M.B.A., Golden Gate University, 1985**

**A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of**

DOCTOR OF PHILOSOPHY

URBAN SERVICES/HEALTH SERVICES

**OLD DOMINION UNIVERSITY
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DEDICATION

To the memory of my late father, Anthony W. Matus

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My deepest gratitude and appreciation to these people for their patience and perseverance:

Dr. Greg Frazer for his untiring support and encouragement. A true friend and trusted advisor who made the process entirely enjoyable. His scholarship and collegiality have been a force in my life for which I am extremely indebted.

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Abstract

An Assessment of Personal Characteristics, Job Satisfaction and Semantic Descriptors of Virginia Acute and Tertiary Care Hospitals' Chief Executive Officers

The purpose of the study was to identify the determinants of job satisfaction of Virginia Hospital CEO's and to identify those descriptors that best characterize the role of the hospital CEO as defined by the CEO's themselves. The study sample consisted of all hospital CEO's in Virginia as listed by the Virginia Hospital Association. The study employed a four part survey instrument that investigated four major areas: (1) personal and hospital demographics; (2) self rated performance; (3) a semantic scale measuring the concept of Hospital CEO; and (4) The Minnesota Satisfaction Questionnaire. A survey was mailed to 119 CEO's. The response rate was 50%. The mean age of the respondents was 47 years and mean educational level post high school was 6.2 years. The mean hospital size as measured by number of inpatient beds was 215.5 CEO's rated their performance highest in "Employee and Staff Relations" and "Managerial Team Building" and lowest in "Information Systems". The highest mean score was for the semantic adjective "Active" and the lowest mean score was for the adjective "Past". Job Satisfaction was highest for "The chance to do something different from time to time" and lowest for "The chance to tell people what to do".

Six research questions were explored. The first question sought to identify which of person traits, environmental traits, and person-environment fit traits best predict job satisfaction. The results of a multiple regression model indicated that person-environment fit traits as measured by the Semantic Differential

Scale was the only variable that entered significantly into the regression equation $\{t(4)=4.30, p <.0001\}$. The second question concerned which job descriptors are the most significant for hospital CEO's. A factor analysis extracted 10 factors which explained 71.4% of the total variance. The factor that accounted for the highest amount of variance (20.2%) was labelled the affective factor. Variables that loaded on this factor included: (1) clear; (2) happy; (3) rewarding; and (4) pleasant. Research question three evaluated job satisfaction between higher paid and lower paid CEO's. There was no statistically significant difference between higher and lower paid CEO's. Research question four investigated the difference between intrinsic and extrinsic job satisfaction. There was no statistically significant difference between intrinsic and extrinsic job satisfaction scores. Research question five examined the various relationships between age categories and experience categories compared to intrinsic, extrinsic job satisfaction, total Self Rated Performance and Total Semantic Differential Scale scores. There were no statistically significant differences found among any of the variables. Research question six examined the relationship between tenure and job satisfaction. There was no statistically significant difference in the job satisfaction of low tenure and high tenure CEO's.

Based on the study's findings recommendations for research included further exploration of measuring performance and qualitatively analyzing hospital CEO's job satisfaction and job performance. Recommendations for practical application included a management focus on facilitating intrinsic satisfaction.

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Chapter 1

Introduction

Two politically and socially challenging issues facing the United States over the last several years have been the health care crisis and health care reform. At the center of these issues are hospitals, which are the flagship component of a healthcare system some have labelled the best in the world and others have labelled the worst in the world (Brown & Marmor, 1994; Friend & Meighan, 1994). The leaders of those hospitals are the hospital Chief Executive Officer (CEO). There is an ever increasing pressure on these hospital CEO's to provide the leadership for their organizations. Given the aforementioned environment the CEO's must exhibit characteristics which allow each to be innovative, flexible and responsive to change.

Previous research has focused primarily on business CEO's in a very broad sense (Delacroix & Saudagaran, 1991; Zajac, 1990), while there was relative dearth of research into the unique characteristics of hospital CEO's and the unique environment in which they function. What makes the hospital CEO and his environment unique, unlike the majority of his non-hospital corporate CEO counterparts, is that hospitals function in a highly regulated, highly competitive, ever-changing and often times, not-for-profit environment. Additionally, the hospital CEO must meet the conflicting demands of various stakeholders that operate in an imperfect market; these stakeholders include patients, hospital employees, private practice physicians, and

the community as a whole. The pressure for hospital CEO's to perform continues to increase in view of decreasing length of stays, lower reimbursements and managed competition arrangements, forces that all point to a picture of an extremely demanding and challenging environment for hospital CEO's.

Related to the issue of hospital CEO performance is job satisfaction. There is a well-established link between job satisfaction and performance (Vroom, 1964), the basic premise being that more satisfied people perform better than less satisfied people. Beyond the issue of performance and job satisfaction is the question of what is it like to be a hospital CEO. This study intends to gain an understanding of how a hospital CEO describes his environment, how well he is satisfied with his job, and how he rates his performance. By developing this understanding it is hoped that improvements in the selection of the best qualified individuals to lead hospitals will occur.

Another often studied area related to understanding the dynamics of CEO's and often studied has been the issue of Chief Executive Officer's (CEO) compensation and their relative worth to their respective companies. The issue reached a crescendo in 1992 when then President George Bush, accompanied by many American CEO's, made an historic trip to Japan to meet with Japanese business leaders. It was during this trip that media attention focused on the stark contrast between the salaries of U.S. executives compared to their Japanese counterparts (Vlasic & Gruley, 1992). The perception at least is that U.S. executive's

salaries were proportionally far higher than their Japanese counterparts, especially when using performance based measures, such as shareholder's return on investment.

However, among U.S. hospital CEO's, very few have historically suggested that they are overpaid. Indeed, some would argue that they are relatively underpaid and could command a far higher salary if working in a different industry (Franczyk, 1993). This increased pressure on hospital CEO's to perform, especially in the wake of the health care crisis, subjected their salaries to a new level of scrutiny, as were all health related expenses. Noted CEO compensation expert Graef Crystal recently testified before Congress regarding health care executives compensation, contending that the pay of the chief executives of the top 26 health care corporations had no relationship to their companies performance ("Health-Care Chiefs'", 1993).

A related issue in this arena is hospital CEO turnover. A recent study projected that hospital CEO turnover would increase from 12.8% in 1990 to 16.7% in 1991 (Johnsson, 1992). As recently as 1988, hospital CEO turnover was as high as 18% (Hart, Robertson, Lishner & Rosenblatt, 1993). In spite of these trends, job satisfaction among hospital CEO's remains high. In 1991, 86% of hospital CEO's surveyed indicated they would not choose a different career field if given the opportunity to do so again (Eubanks, 1991). However one recent study of rural hospital CEO's did have some exceptional findings. Hart's study (1993) of rural hospital CEO's who left their positions early (<

4 years tenure) indicated a low level of satisfaction among those who had rated their own performance (Self Rated Performance SRP) high. This is in contrast to previous studies cited by Vroom (1964) which indicated that when one's own performance is rated high, job satisfaction is also high. In the Hart study if the findings were simply low satisfaction and high turnover that would not be very intriguing; however, the finding of low satisfaction coupled with the high scores on SRP do indeed justify further inquiry.

The fundamental question arises as to what is it about hospital CEO's compensation and their job satisfaction that produces this apparent dissonance. Hospital CEO's are paid less than CEO's in comparable positions of other industries, turnover is increasing, pressure to perform is increasing, and in some instances their job satisfaction seems to be high and yet in some very similar situations hospital CEO's satisfaction is low.

Why study job satisfaction at all? Two fundamental reasons are the relationship of job satisfaction to both performance and turnover. Vroom (1964) conducted an extensive review of the literature and found that across 20 studies of job satisfaction and job performance there is a median correlation of .14 and a range of .86 to -.31. Vroom also describes the relationship of job satisfaction and turnover, citing three different studies that indicate a negative correlation ranging from -.13 to -.42 (two of the studies measured morale as the dependent variable). Lawler and Porter (1967) argued much along the same lines in

their discussion of why job satisfaction should be studied again pointing out the relationship of job satisfaction to performance and turnover (Cited in Gruneberg, 1976).

Perhaps the strongest criticism offered against the study of job satisfaction is the criticism that it is a rather weak correlation between job satisfaction and performance. These arguments are best met by suggestions such as Lawler and Porter's who correctly point out "the consistency of the direction of the correlation is quite impressive" (cited in Gruneberg, 1976, p.209). This writer agrees and suggests that this is in and of itself justification for further study.

Traditionally the study of job satisfaction has focused on one of three approaches to identifying the determinants of job satisfaction, either an individual focus, an environmental focus, or a person-environment fit (P-E fit) (Cranny, Smith & Stone, 1992; Gruneberg, 1976). Each methodology has its particular strengths in its ability to identify some of the variables that influence job satisfaction; however no method takes a truly comprehensive approach in analyzing the job satisfaction equation.

An additional concept within the framework of job satisfaction is the concept of intrinsic and extrinsic satisfactions. Intrinsic satisfaction is related to the job itself and the individual's sense of accomplishment. Extrinsic satisfaction is associated with pay, the organization, level of supervision and status. In this study we will be particularly

concerned with partitioning these two types of satisfaction as a further refinement to our basic model. The result should be a more precise understanding of what influences what type of satisfaction.

Purpose

The purpose of this study is to identify the determinants of job satisfaction of hospital CEO's using a multi-dimensional approach. Specifically, the study will look at individual traits - age, education, tenure, self rated performance; environmental traits - hospital type (Government/Non-Government; Profit/Not-for-profit; Urban/Rural), number of beds, number of full time equivalents, budget, market share, census and salary and finally, person-environment fit traits as measured by a semantic differential scale. By analyzing the concept in a multi-dimensional approach the study should yield a more comprehensive model that identifies the most salient determinants of job satisfaction. Additionally, the study will identify those descriptors that best characterize the role of the hospital CEO as defined by hospital CEO's themselves.

Rationale

By examining the various relationships of job satisfaction of hospital CEO's in this multi-dimensional approach, a more powerful model will be built. Some underlying theories affecting job satisfaction will be tested, including Herzberg's (1957)

Theory of Motivation, Lawler and Porter's (1967) Expectancy Theory, and Dawis and Lofquist's Theory of Work Adjustment (1984). Two other important concepts to be explored are the relationships of an individual's Self Rated Performance (SRP) to job satisfaction and tenure to job satisfaction. Previous studies of SRP and tenure have been rather sparse and their findings equivocal (Vroom, 1964; Hulin & Smith, 1964 cited in Gruneberg, 1976; Hart et al, 1993; Gibson & Klein cited in Gruneberg, 1979).

A final element in the proposed study is to focus on hospital CEO's in Virginia. The sample is broad enough to offer a variety of hospital types including (a) urban and rural (b) profit and not-for-profit and (c) government and non-government. The population of hospital CEO's is also large enough (n = 119) to account for the heterogenous aspects of various CEO's. It is also appropriate to look at Virginia in particular given the current focus on the healthcare crisis. Virginia has several especially acute needs in urban areas, witness the extremely high infant mortality rate in cities like Portsmouth and Norfolk. In an environment of ever dwindling resources and increasing expenses the fundamental question of whether hospital CEO's are paid too much or too little begs asking.

Assumptions

The following assumptions apply to this study:

1. All respondents will answer honestly and completely.
2. The measurement instruments are reliable and valid.
3. The Minnesota Job Satisfaction (MSQ) measures components of job satisfaction.
4. The semantic differential scale encompasses measures of the concept of hospital CEO.
5. The self rated performance instrument measures components of job performance.
6. The methods suggested by Dillman (1978) maximize the response rate.

Delimitations

The following delimitations apply to this study:

1. Hospital CEO is defined as the incumbent as listed by the Virginia Hospital Association.
2. The sample is drawn from Virginia hospital CEO's only.
3. The sample size is 119, namely all those hospital CEO's as listed by the Virginia Hospital Association.
4. The sample did not include other health care executives such as health systems CEO's or other health related industry executives.
5. The personal characteristics of the sample are predominately male, caucasian.

Limitations

The following limitations apply to this study:

1. Self-selection in a survey type study is possible. Those who respond may also be very likely to be those who are the most satisfied with their jobs.
2. A low response rate limits the generalizability of the findings.
3. The execution of the survey may coincide with the end of a fiscal year, which depending on the financial results at a given hospital may exert unusual influence on the respondents.
4. The validity of the self rated performance (SRP) measure is subject to the integrity and objectivity of the individual respondent.
5. The SRP measurement tool does not measure other aspects of performance such as financial performance indicators or patient satisfaction indicators.

Definitions

1. Job satisfaction - "a pleasurable or positive emotional state, resulting from the appraisal of one's job or job experience" (Locke, 1976 cited in Cranny, Smith, & Stone, 1992).
2. Intrinsic satisfaction - "aspects which relate to a person's feeling about the job itself (e.g. the feeling of accomplishment)" (Arvey & Dewhirst, 1979 p. 19)
3. Extrinsic satisfaction - "those features in jobs associated with or directly administered by supervisors (e.g. pay) or organization conditions" (Mitchell, 1974 cited in Arvey & Dewhirst, 1979 pp. 19-20).

4. Self Rated Performance (SRP) - How the hospital CEO rates his own performance along a five point scale in ten areas of hospital management. (Hart, Robertson, Lishner, & Rosenblatt, 1993).
5. Person-Environment Fit (P-E Fit) - "...the concept of correspondence between individual and environment, which implies conditions that can be described as a harmonious relationship between individual and environment, suitability of the individual to the environment and of the environment for the individual, consonance or agreement between individual and environment, and a reciprocal and complimentary relationship between the individual and the environment" (Dawis & Lofquist, 1984 p.54).
6. Semantic Differential - "...a concept to be differentiated and a set of bipolar adjectival scales against which to do it..." (Osgood, 1957, cited in Snider & Osgood, 1969, p.58).

Chapter 2

Review of The Literature

There is a rich history of the study of job satisfaction dating back to the early work of Abraham Maslow's (1943) hierarchy of needs theory up to more recent emerging theories in areas such relative deprivation theory (Crosby 1976) and situational occurrences theory of job satisfaction (Quarstein, McAfee & Glassman, 1992). The common thread throughout most of the literature is the attempt to get at three major issues. First is to define what is job satisfaction; second is determining how to measure job satisfaction; third is identifying the determinants of job satisfaction. It is the third area that ultimately is of most interest and value to researchers and readers alike. Underlying these three issues and at the very heart of all job satisfaction research are the theoretical bases.

The review of the literature will give a brief overview of the definition, measurement and determinants of job satisfaction. With the overview as a foundation a detailed review of the major job satisfaction theories will be discussed. A summary will conclude the chapter.

Job Satisfaction Defined

Locke (1976) defines job satisfaction as, "a pleasurable or positive emotional state, resulting from the appraisal of one's job or job experiences" (cited in Cranny, Smith & Stone, 1992 p. 2). Vroom (1964) defined an individual's job satisfaction as

"directly related to the extent to which their jobs provide them with such rewarding outcomes as pay, variety in stimulation, consideration from their supervisor, a high probability of promotion, close interaction with co-workers, an opportunity to influence decisions which have future effects on them, and control over their pace of work" (cited in Quarstein et al., 1992 p. 860). Wanous and Lawler (cited in Gruneberg 1979) noted nine different operational definitions of job satisfaction, with each definition being dependent upon the theoretical basis that applied. Despite such variety there seems to be wide agreement among experts in the field as to the meaning of job satisfaction (Cranny et al., 1992).

Measurement of Job Satisfaction

There are several instruments commonly seen in the literature that measure job satisfaction. Each has its particular strengths and weaknesses, and many have been developed to meet a particular need or incorporate some aspect of the underlying theory. Some of the more popular instruments are discussed below.

One frequently seen instrument is the Job Descriptive Index (JDI). The JDI measures five major aspects: work, pay, promotion, supervision, and coworkers. As Cranny et al., (1992) reports, "This instrument has proved reliable and valid, and is very widely used" (p. 7). The JDI is most commonly associated with the Person-Environment (P-E) fit school of thought. The

author will elaborate on P-E fit theory in subsequent discussions, but for our immediate purposes P-E fit has to do with how well a person "fits" into his environment. Dawis (1992) explains, "The JDI...conceptualized job satisfaction as being associated with what is expected (or aspired to) and what is experienced -in other words, subjective P-E fit" (cited in Cranny et al., 1992, p.73). The distinction of subjective fit is not a small one, and indeed Dawis elaborates further that there is also objective P-E fit as well as perceived P-E fit.

Another instrument is the Minnesota Satisfaction Questionnaire (MSQ) which measures attitudes about an individual's job rated on a five point scale ranging from not satisfied to extremely satisfied. The constructs that the MSQ measures include intrinsic aspects of the job such as work challenge as well as extrinsic factors such as level of supervision (Arvey and Dewhirst 1979). The MSQ comes in both a long form (100 items) and a short form (20 items). The MSQ is also reported as reliable (Cranny et al., 1992) and has been widely used.

Other instruments cited by Moorman (1993) include the Faces scale (Kunin, 1955; Dunham & Herman, 1875), the Brayfield-Rothe (1955) satisfaction scale, and the Facet Free job satisfaction scale (Quinn & Staines, 1979). The instruments vary to some extent as to whether their measures are more cognitive or affective. Additionally, there are reported various measures of job satisfaction which simply ask the question to the effect,

"How satisfied are you with your job"? Such measures appear to be of limited value except when being used in the context of measuring a much larger concept such as general life satisfaction, for example.

Determinants of Job Satisfaction

Herzberg (1959) describes five factors as determinants of job satisfaction - achievement, recognition, work itself, responsibility, and advancement. As we shall see later, these factors or determinants tend to focus on the work environment as it relates to the individual rather than any determinants that might describe an individual. Vroom (1964) describes six determinants of job satisfaction - supervision, the work group, job content, wages, promotional opportunities, and hours of work. Here again we see that all of these determinants take on an environmental focus with the possible exception of promotional opportunities which is somewhat of a reflection of an individual focus. A related concept to the issue of what this author describes as futuristic factors and its role in individual focus is Lawler and Porter's (1969) expectancy theory wherein they describe one's expectations as a principal determinant of job satisfaction. Hackman and Oldham (cited in Quarstein, et. al 192) suggested in their job characteristics model that an individual's satisfaction is determined by the person's psychological state which is determined a priori by five job dimensions - task variety, task identity, task significance, task

autonomy, and feedback. Finally, there has been a great deal of research that has explored a variety of individual demographic and personality variables such as age, sex, race, education, diversity of interests, and even scores on the Myers-Briggs Type Indicator (MBTI), a type of personality profile score. Table 1 is a brief summary of some of the several studies and various determinants analyzed.

New (Old) Determinants Revisited

As suggested in the introduction, the areas of self rated performance (SRP) and tenure have been given very little examination as determinants of job satisfaction. A brief overview of these two determinants follows.

The concept of SRP as a determinant of job satisfaction is distinctly different from the plethora of research done on job satisfaction as a determinant of performance. Vroom (1964) suggested:

It is possible that the performance measured bears no relation to workers' conceptions of their performance. The latter is the variable which would be expected to affect satisfaction; a relationship between actual level of performance and satisfaction is predicated on the assumption that workers have accurate knowledge concerning their performance. If this explanation is correct, then we would expect to find a positive relationship between

Table 1
Summary of Job Satisfaction Determinants

Study Author(s)	Variable(s)	Population	Relationship to Job Satisfaction	Citation
Vollmer & Kinney (1955)	Education	Civilian Ordinance Employees	Negative	Gruneberg (1979) p.96
Herzberg (1957)	Education	Engineers Accountants	Positive	Gruneberg (1979) p.97
Bergmann (1981)	Education Age Hierarchical Level	Managers	Positive Positive Positive	Bergmann (1981) pp. 275-288
Arvey & Dewhirst (1979)	Age	Scientists & Engineers	Positive	Arvey & Dewhirst (1979) pp. 17-23
Saleh & Otis (1964)	Age	Not Available	Positive	Gruneberg (1979) p.91
Herzberg (1957)	Age	Engineers Accountants	Positive	Gruneberg (1979) p.91
Wild & Dawson (1972)	Tenure	Not Available	Positive	Gruneberg (1979) p.93
Hulin & Smith (1970)	Tenure	Female Clerical	Positive	Gruneberg (1979) p.93

Table 1

Summary of Job Satisfaction Determinants

Study Author(s)	Variable(s)	Population	Relationship to Job Satisfaction	Citation
Halpin & Winer (1957)	Consideration (of Supervisor)	Aircraft Commanders & Crews	Positive	Vroom (1964) p.110
Fleishman, Harris, & Burt (1955)	Consideration (of Supervisor)	Foremen & Workers	Positive	Vroom (1964) p.110
Seeman (1957)	Consideration (of Supervisor)	School Superintendents & Teachers	Positive	Vroom (1964) p.110
Elizur & Tziner (1977)	P-E Fit	Not Available	Positive	Dawis & Lofquist (1984) p.77
Gibson & Klein	Tenure	Blue Collar Workers	Positive	Dawis & Lofquist (1988) p.77
Porter (1962)	Hierarchal Level	Managers	Positive	Vroom (1964) p.130
Rounds & Dawis (1975)	P-E Fit	Not Available	Positive	Dawis & Lofquist (1984) p.77

estimates by the worker of his level of performance and his job satisfaction, even though there is no association between the latter variable and actual performance (p.146).

Vroom further cites two different studies that both supported this idea with findings of a positive correlation between perceived performance and job satisfaction. Yet in a recent study of CEO turnover in rural hospitals an opposite finding is made (Hart et al. , 1993). In this particular study the so-called turnover hospital CEO's (tenure < 4 years) rated their own performance (SRP) much higher than did their respective hospital boards of directors, yet the CEO's satisfaction is relatively low. Indeed, a finding of low satisfaction and high turnover is not very compelling; however the additional finding of a fairly high SRP coupled with low satisfaction and high turnover is worthy of closer examination.

The second determinant that we want to consider is that of tenure. Hulin and Smith (1964, cited in Gruneberg 1976) suggest that age and tenure are positively related to job satisfaction. Gruneberg (1976) points out a dissenting opinion on this relationship, citing a 1957 article by Herzberg, Mausner, Peterson and Capwell. In yet another study by Gibson and Klein (1970 cited in Gruneberg, 1979) they found a negative relationship with tenure and satisfaction, just the opposite of previous studies. Gruneberg (1979) suggests that these conflicting findings may be related to hierarchal factors since the Gibson and Klein study is of blue collar workers and "...they suggest that frustration at seeing others promoted to management positions may increase dissatisfaction" (p.93). The important

indication here is that simple bivariate relationships do not always tell the whole story. It is therefore that we consider further inquiry into the phenomenon of tenure as part of a multivariate approach as it relates to job satisfaction.

Summary

As the above discussion indicates, there is much more conceptual agreement over how job satisfaction is defined as well as wide agreement that job satisfaction can be measured. However there is much less agreement over the determinants themselves of job satisfaction, and they are indeed much more varied than the three focuses themselves. In fact it is usually the type of focus a given researcher takes that drives the determinants analyzed.

Three Approaches to the Study Of Job Satisfaction

Another common thread throughout the literature is the approach that most researchers assume in their studies as we have already seen in the discussion of determinants of job satisfaction. The approaches include an **individual focus**, an **environmental focus**, and a **combination of individual and environmental focus**, often called the **person-environment fit (P-E fit)**. Schneider, Gunnarson and Wheeler (cited in Cranny, et al. 1992) also similarly describe three strategies as "personal correlates", "situational correlates", and person-environment fit" as they describe the effect of opportunity in the job

satisfaction concept. We look at an example of each of the focuses.

Individual Focus

Pelz and Andrews (1966) first developed a model that examined the relationship between an individual's areas of interest and their work performance. Their studies suggested that people with wider interests tend to be better performers on the job. From that initial study Arvey and Dewhirts (1979) examined the relationships between diversity of interests, job performance and job satisfaction. In this particular study, Arvey and Dewhirts measured satisfaction using the MSQ, performance is measured by analyzing salary information (as a proxy measure of performance) and diversity of interests is measured using the Strong Vocational Interest Bank. Their findings indicated that persons with higher diversity of interests tended to have more satisfaction and tended to perform better than those with less diverse interests.

Environmental Focus

One of the first classic studies of job satisfaction was conducted in 1959 by Frederick Herzberg wherein he developed his landmark Motivation-Hygiene theory. Herzberg determined that there were actually two factors that operated simultaneously at different levels that had different effects. Specifically, motivation factors such as achievement, recognition, the job

itself, responsibility and advancement all contributed to satisfaction. Hygiene factors however, or maintenance factors such as pay, supervision, company policy, job security and personal relations only served to prevent dissatisfaction, but did nothing to contribute to satisfaction. The distinction is perhaps a subtle, but important one. Herzberg concluded that in view of his findings management should concentrate on the motivation factors while also recognizing that hygiene factors were simply the baseline requirement to prevent employees from becoming dissatisfied.

Person-Environment Fit Focus

Bergmann (1981) explored a combination approach to job satisfaction in his study "Managers and their organizations: An interactive approach to multidimensional job satisfaction". In this study the independent variables of interest were age and education (individual focus) and hierarchal level (environment). Hierarchal levels were divided into two groups, top management and middle/lower management. In this study Bergmann found that hierarchal level is the strongest predictor of job satisfaction, with top level management indicating the highest satisfaction. Among both top level management and middle/lower management those managers with higher education also indicated greater satisfaction with compensation than those with less education.

A related school of thought to the individual-environmental focus is often referred to as the Person-Environment Fit (P-E

Fit). Whereas in the Bergmann example above, in which one or more variables were controlled, in the P-E fit approach it is the goodness of the fit that is measured as an independent variable to predict job satisfaction. In one study (Harrison 1978 cited in Cranny, et al. 1992) the P-E fit correlated .47 with job dissatisfaction. We note here parenthetically that although Herzberg views the concepts of job dissatisfaction and job satisfaction as two independent concepts many would argue that they are one concept along a continuum (Gruneberg 1992). There is however some disagreement over the P-E fit as reported by Katzell(1964) who argues that only through separate measurement of the person and the environment (job characteristics) can the influences on job satisfaction be identified. Vroom (1964) however, argues just the opposite. He states, "Job satisfaction must be assumed to be the result of the operation of both situation and personality variables. It is only through simultaneous study of these two sets of factors that the complex nature of their interactions can be revealed" (p.173).

Summary

It would seem that all three focuses have some predictive power in explaining job satisfaction; however there is no consensus over which methodology is best. This writer favors a multi-dimensional approach as it would seem to hold the most promise for offering substantive solutions in the applied world; solutions for both workers and management that may increase job

satisfaction. There is an intuitive sense that the forces of individuals and environments act and react to and upon one another. Moreover, it is possible that there is a synergistic effect that cannot be teased out by simply measuring any one dimension at a time.

The following section in our review of the literature will focus on an overview of the major theoretical frameworks most often associated with the study of job satisfaction. Additionally, a brief description will be given to some of the emerging theories.

The Motivation-Hygiene Theory

The brief discussion above of Herzberg's (1959) motivation-hygiene theory is offered as an example of the environmental focus to the study of job satisfaction. Herzberg's research involved interviews with two hundred engineers and accountants using a critical incident technique wherein respondents were asked to describe a time when they felt particularly good or bad about their job. From the results of this interview process Herzberg developed his two factor theory.

Herzberg contended that there are actually two distinct types of factors that influenced job satisfaction. The first category of factors he labeled motivation factors. He listed these factors as achievement, recognition, work itself, responsibility and advancement. Herzberg contended that these factors can contribute to satisfaction but not dissatisfaction.

The second category of factors, those that he described as hygiene or maintenance factors, if not present in the work situation would lead to dissatisfaction, and although they were necessary for satisfaction, they did not necessarily contribute to satisfaction. These hygiene factors he listed as company policy, supervision, salary, interpersonal relations and working conditions. The partitioning of job satisfaction into these two distinct planes, satisfaction and dissatisfaction was revolutionary at the time and immediately became influential in the science for many years. Gruneberg (1979) explains:

In splitting the factors involved in job satisfaction in this way, Herzberg argues that the causes of job satisfaction and job dissatisfaction are separate and distinct. An analogy might be with the concepts of pleasure and pain...the mere absence of pain is not pleasurable itself...it may be that the relief of pain is considered pleasurable. (p.11)

Put another way, the hygiene factors described by Herzberg - company policy, supervision, salary, interpersonal relations and working conditions - cannot lead to satisfaction; rather they can only work to prevent dissatisfaction. Conversely, satisfaction will only grow out of the motivational factors - achievement, recognition, work itself, responsibility and advancement.

Several studies since the introduction of Herzberg's Motivation-Hygiene Theory have been completed. One of the first to empirically test Herzberg's ideas was conducted by Dr. Milton

Schwartz of Rutgers University. In his study of 111 male supervisors selected from various gas and electric utility companies Schwartz (1959) found substantial support for Herzberg's theory. Specifically he found that motivators contributed to satisfaction by a 7-to-1 ratio while hygiene factors related to dissatisfaction by a 3-to-2 ratio.

Inasmuch as Herzberg's two factor theory seemed to serve as a catalyst to renew interest in job satisfaction studies and was credited with underlining the important aspect of the job itself as an influence in job satisfaction (Gruneberg 1979), his theory nevertheless soon came under attack from several fronts.

One of the strongest criticisms of Herzberg's work was his use of the critical incident method for data collection. Gruneberg (1979) explained "...the critical incident technique is that it may induce respondents to blame unsatisfactory events on others, for example, their supervisor (hygiene factor), whilst taking credit themselves for the good things that happen, for example, claiming responsibility (motivator)" (p.15). Herzberg himself addressed that criticism in his follow up work positing that just the opposite is the case. Herzberg (1968) contends "Assuming there is bias, the probable bias to obscure the motivation-hygiene theory rather than enhance it. The supposition that people would prefer to blame hygiene factors rather than the motivators for their job unhappiness in order to make themselves look good is naive" (p.130).

Another weakness of the critical incident approach is that

not all types of dissatisfiers may occur as a critical incident - if one must walk a great distance from the employee parking lot everyday, this may not show up as a critical incident but may indeed be a great dissatisfier. However, the strongest indictment against Herzberg's theory has been the many attempts to verify the theory using other data collection methods yet they "...have met with almost universal failure" (Gruneberg, 1979, p.16)

A final weakness of Herzberg's theory is that the various factors are not given any relative weights as to how much they affect job satisfaction.

In spite of the stated weaknesses of the two factor theory its place seems secure in the literature if not as a widely accepted theory then at least as a widely accepted starting point. Gruneberg (1976) gives this endorsement, "Nevertheless there is little disagreement among theorists on the importance of the job itself as a major factor in job satisfaction for most individuals, and to this extent at least Herzberg's influence has been immense" (p. xii).

Expectancy Theory

Vroom (1964) introduced the concept of valence as part of his model to explain motivation and job satisfaction. His is often referred to as an expectancy theory (Lawler, 1969; Gruneberg, 1976). Vroom describes valence as being either

positive, neutral or negative dependent upon how an individual feels about a particular outcome, in other words a person's preferences. Vroom's valence model would hold that if a person prefers achieving something over not achieving it (event X) then event X is said to have a positive valence. Conversely, if he prefers not to achieve event Y, then event Y is said to have a negative valence. If a person is neutral in his feelings towards an event its valence is zero. Vroom makes a distinction, however, between valence and value. According to Vroom (1964) valence is the expected outcome whereas the value is "the actual satisfaction that it provides (i.e., its value) sic" (p. 15).

Vroom defines expectancy as a subjective judgement of the probability that one's effort will achieve performance. Instrumentality is the probability that the performance will result in a reward. These two concepts, expectancy and instrumentality, combine in what Lawler (1969) describes as the effort-reward probability.

Using the concepts of valence and expectancy as a foundation, Vroom then posits that these two concepts drive the concept of force. He states that the combination of valence and expectancy and their respective weights determine the strength of force which in turn determines choices. He explains, "This formulation is similar to the notion in decision theory that people choose in a way that maximizes subjective expected utility". (p.19) Vroom's model has often been described as a multiplicative model (Lawler, 1969; Gruneberg, 1976). Lawler

explains that (using Vroom's model) "...for a given reward, reward value (valence) and the effort-reward probability combine multiplicatively in order to determine an individual's motivation" (cited in Gruneberg, 1976, p.91). From this model it is posited that in order to increase an employee's motivation management must change the valence of the outcome or change the person's perceptions about the probabilities of outcomes which are dependent upon certain efforts.

One critic of Vroom's needs theory is Locke (1976). Locke notes that the model does not account for the degree of one's needs of something nor does it explain how much of something one may need. Yet Vroom acknowledges the problems concerning the measurement of the concepts in his model and suggests that the measurement will be very much dependent upon how the variables are operationalized. Vroom suggests that the measurement and manipulation of valence and expectancy be pursued from an "eclectic" approach.

Among his suggestions for the measurement of valence are the use of verbal reports. He suggests a self-report measure as to how one feels about a particular event is perfectly valid and frequently used in psychology. A second approach is analysis of fantasy. He very briefly describes the methodology wherein respondents are asked to tell stories about pictures and from those stories scores are developed. The third approach uses outcomes of new learning. The logic to this method is that if an outcome strengthens learning, then the outcome is positively

valent. He points out that this method does not lend itself to measuring the strength of the valence, only general direction. The fourth method is to measure valence through the choices of outcomes that people make. This method assumes equal probability of outcome X or Y and then measures which the person would prefer. An ordinal level of measurement is possible, an improvement over method three. The fifth method he suggests is consummatory behavior. Observers measures how much and at what rate one consumes something to determine its valence. A flaw with this method is that non-consumption does not equate with negative valence. His last method suggests that a measure of decision time could be used to determine an outcomes valence. The quicker one decides he wants A over B, the more valent is A.

In order to measure expectancy, Vroom again suggests verbal reports as one approach. This method he points out is subject to some criticism, similar to criticism of inherent bias in self-report measures. An alternative method he describes is an inference based on decisions actually made by a person. He uses the example of a person betting \$5.00 on the chance of winning \$50.00, the psychological probability is equal to .10. Both methods have some utility, but Vroom does not offer enthusiastic support for either method nor offers any other alternatives.

Vroom's discussion of manipulating valence outlines three suggested methods. One is to influence the desirability of the outcome. He suggests telling a subject positive things about an

outcome may have the effect of increasing the outcomes valence. A second method is "arousing appropriate motives". Withholding food from a subject to increase the valence of the food, for example. The third technique he suggests is the role of learning as it relates to valence of an outcome. Here he suggests that methods using rewards and punishments in conjunction with learning can effect the valence of outcomes.

To manipulate the expectancy Vroom suggests one method would be to simply tell a person what the probability is of a certain outcome occurring. Another method he suggests is to assume that objective probabilities of outcomes correspond with what the person thinks the probability of an outcome is. A third method is to manipulate the "proportion of times the person has received the outcome following the act" (p.26).

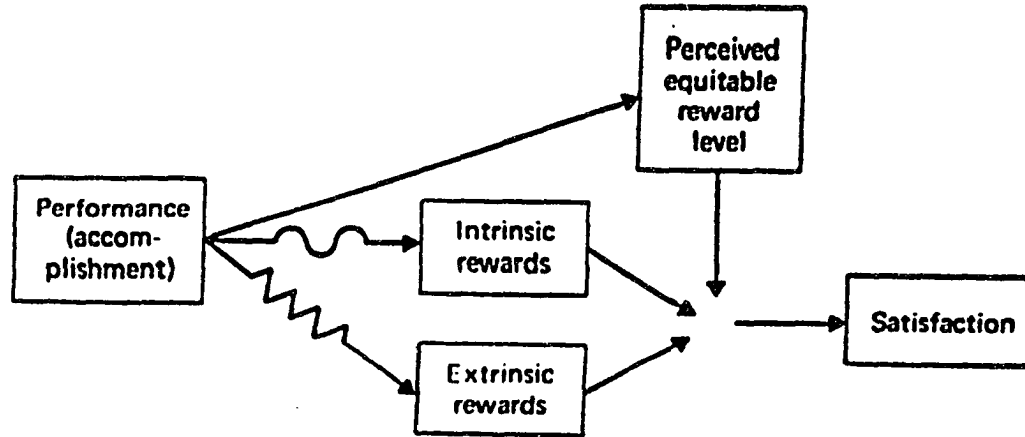
To summarize Vroom's theory, the major points are that rewards have either a positive, neutral or negative valence. The valence is determined by a person's perceived value of the reward. The expectancy is the person's subjective judgement of the probability that his effort will result in achieving the reward.

Vroom (1964) himself cites several studies in support of his Valence Theory. For example he cites two studies, one by himself (unpublished) and one by Englander (1960) in which he stated, "...both investigations, index scores obtained by combining data on the valence of outcomes and data on the instrumentality of occupations for their attainment in the manner specified in the

hypothesis were found to be highly related to occupational preferences and choices" (p.279).

A second expectancy theory offered by Lawler and Porter (1967) is compelling in that, as Figure 1 depicts, performance results in satisfaction rather than vice versa as had been previously assumed. Using their model the reasoning is that performance results in two types of rewards, intrinsic, those that a person gives to himself, and extrinsic, those that are given to a person by the organization, which then combine to a summative value of one's job satisfaction. The more condensed wavy line between performance and extrinsic rewards depicts a less perfect link between the two concepts due to the difficulty in relating performance to specific extrinsic rewards, such as pay bonuses or promotions. The cause and effect relation is not as clear cut as the relationship between intrinsic rewards and satisfaction. The less wavy line between performance and intrinsic rewards depicts this closer relationship because of the ease with which an individual may reward himself.

Aside from the obvious turn-around in the relationship of satisfaction and performance, this model is important for its introduction of the moderating effect that perceived equitable rewards has upon satisfaction. The model holds that an individual will be more satisfied if the amount of reward he receives is closely related to the amount of reward he thinks he should receive, which in turn reinforces the relationship between



Lawler and Porter's Expectancy Theory Model

Figure 1

performance and satisfaction. This model also holds that intrinsic satisfaction will be greater than extrinsic satisfaction since the effect of the moderator variable will not be as great. This will be tested in this study as the MSQ measures satisfaction along both the intrinsic and extrinsic dimensions.

The model also implies that better performers should receive greater rewards than lesser performers, a page from Adam's (1963) equity theory, in a manner of speaking (cited in Wallace & Fay 1988). However, one critic of the equity view is Locke (1976) who "argues that the problem with equity theory is not so much that it has been shown wrong but that it is so loose that it is able to account for anything" (cited in Gruneberg, 1979, p.21). Likewise the model suggests that if rewards are not linked to performance a negative relationship of satisfaction and performance will exist. However, the model would also suggest that over reward would also cause dissatisfaction. This piece of the model seems not only less appealing intuitively, but in fact evidence reviewed by Pritchard, Dunnette, and Jorgensen (1972) is rather weak in support of this contention(cited in Gruneberg, 1979). Schwab and Wallace (1974) also take exception to the view that pay for performance schemes will necessarily increase job satisfaction (cited in Gruneberg 1976). They cite a study by Pritchard, Dunnette and Jorgensen (1972) that indicated persons paid a flat hourly rate were more satisfied than those paid under an incentive plan.

Lawler and Porter's model is of course, similar in many respects to Vroom's - both have the element of expectation and perception as an integral aspect in developing an understanding of job behavior (performance) and job satisfaction. Another commonality is the distinction between effort and performance. Lawler and Porter (1967) suggest that "satisfaction should be more closely related to ... performance than ... effort". (cited in Gruneberg, 1976, p. 211). Yet the model does not fully explain how effort and performance are differentiated and how the two concepts account for satisfaction. Their model suggests that satisfaction will affect effort, but the model does not explain the effect of high effort and low performance or low effort and high performance on job satisfaction. It's not difficult to imagine one having a sense of satisfaction for having put forth a high effort, despite what may have been a low performance, the losing pitcher in a baseball game, for example. Lawler and Porter themselves point out that other variables affect performance besides effort, such as ability and organizational characteristics or in the example of the pitcher, poor defense.

In Lawler and Porter's (1967) own study of 148 lower and middle managers they found empirical support for their model. In particular they found, as predicted, that job satisfaction was significantly correlated with performance rankings by superiors ($r=.32$, $p < .01$) and that job satisfaction was correlated with effort ($r=.23$).

The issue of which direction the association of job

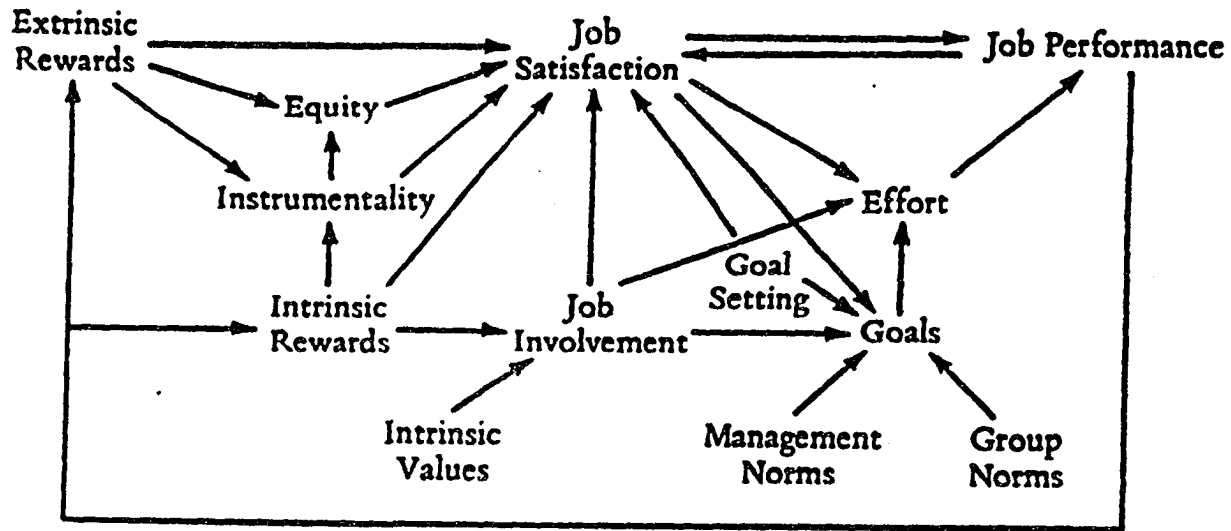
satisfaction and performance appears to be as yet not fully resolved. Others have suggested a reinforcing effect between job satisfaction and job performance, see figure 2 (Katzell, Thompson & Guzzo, 1992, cited in Cranny et al.). The Lawler and Porter model, while useful for distinguishing between intrinsic and extrinsic rewards, is similarly lacking as in Vroom's model, in that there is no relative weight given to the various determinants of job satisfaction as they describe the process.

Work Adjustment Theory

Dawis and Lofquist (1984) explain the Theory of Work Adjustment from a vocational psychology frame of reference. Their interest lies not so much in the areas of explaining the typical concerns associated with job satisfaction, namely performance and turnover, but rather its application to counselling psychology. However, though their results from understanding work adjustment may have a different purpose than ours in understanding job satisfaction, their theoretical framework is still quite useful. Their work is also among the class of theories known as person-environment (P-E) fit theory.

The foundation of the theory of work adjustment rests on their term correspondence. By correspondence Dawis and Lofquist mean "...conditions that can be described as a harmonious relationship between individual and environment" (p. 54). Their basic theory has several postulates including:

- I. Each individual seeks to achieve and maintain



Path Model of Job Satisfaction and Job Performance
by Katzell, Thompson & Guzzo

Figure 2

correspondence with the environment.

II. Work represents a major environment to which most individuals must relate.

III. Correspondence can be described as the individual fulfilling the requirements of the work environment and the work environment fulfilling the requirements of the individual.

IV. The continuous and dynamic process by which the individual seeks to achieve and maintain correspondence with the work environment is called work adjustment.

V. Satisfactoriness and satisfaction indicate the correspondence between the individual and the work environment. (pp. 54-55)

The distinction between satisfactoriness and satisfaction is that satisfactoriness is defined externally, i.e. from some source other than the employee; satisfaction is as defined by the employee. Their theory further states that to the extent there is correspondence a worker will remain on the job, defined as tenure. As correspondence increases, the likelihood of tenure also increases. They state that tenure is the basic outcome measure of correspondence.

A study by Anderson (1969) of 809 people across seven occupations supported Dawis and Lofquist's Work Adjustment Theory. "Anderson (1969), in a two year longitudinal study ... found that individuals who were satisfied ... at time 1 were significantly more likely to have remained in the job at time 2

than were individuals who were dissatisfied..." (cited in Dawis & Lofquist, 1984, p.80)

The theory holds that correspondence is achieved when there is equal satisfactoriness (the environment is satisfied with the person) and satisfaction (the person is satisfied with the environment). It is not surprising that since their primary interest is in the adjustment of the individual most of their theoretical framework is built around the response of the individual to the environment and focuses on ways for the individual to adjust to his environment; however, the theory is less clear in terms of describing how the stakeholders of the environment (i.e. management) can adjust the environment to the individual in order to increase correspondence. This is no small point as Caplan (1987) highlights, "... a recent survey that asked members of management and union for their views on how stress should be reduced in organizations ... each group thought the other should change (Neale et al., 1987)" (p.258).

An important point to note in the work adjustment theory is that the focus is on objective measurement of the person and environment. Dawis (1992) explains, "...because our research problem at that time was the prediction of future, rather than current, work adjustment (hence, future job satisfaction), the choice of objective rather than subjective P-E fit made more sense" (cited in Cranny et al. 1992, p.79). The objective measurement approach contrasts greatly with an alternative approach suggested by French and Khan (1962) that incorporates

subjective measures as well (cited in Cranny et al., 1992).

Nevertheless in broad terms the theoretical framework Dawis and Lofquist describe is at the very least intuitively attractive and is empirically supported (Carlson, Dawis, England and Lofquist, 1963, cited in Dawis & Lofquist 1984).

A competing view to the measurement of P-E fit is described by French and several of his associates at the University of Michigan (French & Kahn, 1962; French, Rodgers, & Cobb, 1974; Harrison, 1978; House, 1972; Pinneau, 1976, cited in Cranny et al., 1992). Their approach to developing a model for P-E fit incorporates four basic measures. The measures are objective measurement of person and environment and subjective measures of person and environment. The result is two composite measures of objective P-E fit and subjective P-E fit that interact to form a person's total P-E fit. The Michigan group's work on P-E fit has been used in the study of job strain and job stress; however, its theoretical appeal to application in job satisfaction is obvious.

The controversy is still unresolved over subjective versus objective measures in determining P-E fit. Banis (1992) found in his extensive literature review of P-E fit two conflicting views. Walsh (1987) suggested that P-E fit research should examine the relationship between subjective and objective environment. An opposing view by Vondracek (1987) suggested that "an interpretive and process-oriented model of behavior is needed to understand the dynamic interaction between P and J" (cited in Banis, 1992, p.49). Banis uses the term P-J, for person-job fit although it

is well interchangeable with P-E. Dawis (1992) also concludes, "that more study has to be devoted to the question of operationalizing P-E fit" (cited in Cranny et al. 1992, p.84).

A few of the major points that Banis (1992) summarized concerning P-E fit issues in the literature are described below:

1. Measurement issues are at the heart of testing P-J fit. Unfortunately, existing measures appear inadequate and measurement of P-J fit eludes us.
2. Satisfaction and performance should be factored into P-J fit research.
3. Scale scores and profile measures should be used in research instead of simple categorizations.
4. Commensurate measures of P and J are needed.
5. Job satisfaction ...can be used as criterion measures of P-J fit.
6. Behavior should be studied at the level of the whole person in natural settings. (pp.62-63)

Equity Theory

Equity theory, as alluded to earlier in the discussion of rewards, is an important adjunct to understanding job satisfaction in that rewards are an integral piece of most job satisfaction theories, stated either explicitly or implicitly. Equity theory is most often attributed to the initial work of J. Stacy Adams in 1963. Understanding the principles of equity theory will strengthen our foundation to understanding job

satisfaction, especially in terms of how people form their perceptions of equitable rewards.

According to equity theorists people form their perceptions from three inputs of equity: external equity, internal equity and individual equity. These equity perceptions are formulated based on four criteria: (a) a person's own inputs (b) a person's own outcomes (c) a comparison person's inputs (d) a comparison person's outputs (see figure 3). Equity theory suggests that when there is balance between a person's inputs and outputs and the comparison person's inputs and outputs there is equity. If the equation is unequal, resulting implicitly in under-reward or over-reward, then inequity exists.

External equity is defined as the fairness of a wage rate an employer pays for a particular job/position when compared to a comparable job/position in a different company. An example would be the base wage rate for a typist at company X and company Y; if the rates are comparable one would say there is external equity.

Internal equity is defined as the fairness of a wage rate for jobs/positions within an organization. More precisely stated, internal equity is a "job's internal worth to an employer" (Wallace & Fay, 1988, p.52). Historically one of the more problematic areas for evaluating the worth of a job within an organization has been in the area of traditionally gender-bound occupations. For many years it was not uncommon for women to be paid significantly less than men, despite performing jobs

$$\frac{O_p}{I_p} = \frac{O_o}{I_o}$$

where:

O_p = outcomes (rewards) for the person

I_p = the person's inputs

O_o = outcomes (rewards) for a comparison person

I_o = the comparison person's inputs

Individual Equity Theory Model

Figure 3

similar in scope, complexity and responsibility. Wallace and Fay suggest that one approach to the internal equity problem is to use a "compensable factor" approach for estimating the value of a job. The four compensable factors are (a) responsibility, (b) skill, (c) effort and (d) working conditions. The focus in this approach is to objectively evaluate the job on these criteria so comparisons of wages between say the job of nurse and accountant are defensible since the "scoring" of the job has been done on a logical basis, using the four compensable factors.

The third and final form of equity is by far the most elusive, individual equity, since it exists only as defined by the individual. Fair is what the person thinks is fair. Individual equity is the fairness of the wage paid to a particular person. Wallace and Fay (1988) state that, "The individual equity criterion demands that employers pay wage rates to individuals (in the simplest case, workers on the same job) according to variation in individual merit. Better workers should receive higher wages on the same job than poorer workers" (p.18). This is certainly in consonance with many of the underlying precepts of theories such as Lawler and Porter's expectancy theory. One common problem with this premise however is the assumption that management can fairly and accurately rate performance between workers. For a full discussion of the problems associated with performance appraisal see Lee (1987) and Henderson (1980). Patchen (1961, cited in Vroom 1964) studied pay and satisfaction among oil refinery workers. Patchen found

that satisfaction was dependent upon who a person chose as a comparison person. Vroom (1964) noted, "He found that individuals who choose comparison persons who earn more but who are on a higher occupational level are more satisfied with the comparison than are men who choose comparison persons who earn more but are on the same occupational level" (p.152).

The role of pay-for-performance, as it is frequently described, in the job satisfaction literature has been explored in some detail with some rather surprising results. One study by Locke (1965) looked at goal setting and its influence on job satisfaction. He found that job satisfaction is greater for the group that sets its own goals than the control group whose goals were set by the experimenters. Yet these findings contrast to several studies cited by Opsahl and Dunette (1966) which found that workers preferred a straight pay system rather than a piece-rate system (cited in Gruneberg, 1979). One study cited by Warr and Wall (1975) found 60 per cent of employees preferring an incentive or piece rate pay system (cited in Gruneberg, 1979). Clearly this is an area that is in need of further exploration.

Reference Group Theory

Reference group theory is relevant to our review given the aforementioned discussion of evaluations that persons make when comparing their own inputs and outputs to those of others. Reference group theorists posit that "understanding ... the groups to whom the individual relates (reference group) is

therefore of critical importance in understanding job satisfaction" (Gruneberg, 1979, p. 21). A study by Klein and Maher (1966) found less satisfaction with pay among college educated managers than non-college educated managers. Their explanation of this finding is that the college educated managers compared their own pay to a different reference group than the non-college educated managers, specifically to a highly educated and higher paid group. A problem with this theory is that it does not explain how one chooses a reference group or why.

Discrepancy Theory

One of the first to describe a discrepancy theory approach to job satisfaction is Katzell (1964). Katzell explains that satisfaction is a function of the difference between a desired amount of an outcome and the actual amount of the outcome received. His formula is depicted in figure 4. Lawler (1973) points out that Katzell's theory is lacking in that the greater the amount of an outcome a person wants, the less dissatisfied he would be. Lawler points out the illogic of this assumption. Lawler also notes that most discrepancy theorists describe perceived discrepancies vice actual discrepancies.

Locke's (1969) view on discrepancy theory is that perceived discrepancy is what determines the amount of satisfaction. His position is that satisfaction is the net difference between what an individual wants and what he perceives he receives. Locke (1969) explains, "Job satisfaction and dissatisfaction are a

Figure 4

$$\text{Satisfaction} = 1 - \{ (X - V) / V \}$$

Where: X = Actual amount of outcome

V = Desired amount of outcome

Katzell (1964) Discrepancy Theory Model

function of the perceived relationship between what one wants from one's job and what one perceives it is offering" (cited in Lawler, 1973, p.67).

Porter (1961) takes a slightly different view than Locke and Katzell. Porter measures satisfaction by asking people, "how much of a given outcome there should be for their job and how much of a given outcome there actually is" (cited in Lalwer, 1973, p.67). Lalwer (1973) notes that Porter's approach is different than Locke's "...since it sees satisfaction as influenced not by how much a person wants but by how much he feels he should receive" (p.67). Sweeny et al. (1990) examined satisfaction and pay level using a relative deprivation theoretical framework which is very similar to discrepancy theory. The two theories are similar in that both hold that a person's satisfaction is directly related to the difference between how much of something they desire and how much they actually receive. Relative deprivation theory goes a step further than discrepancy theory in that it also takes into account the influence of comparison persons. The Sweeny et al. study found that as the amount of discrepancy increased between desired income and received income satisfaction decreased supporting the basic premise of Katzell's discrepancy theory.

Situational Occurrences Theory

The situational occurrence theory explains job satisfaction as a function of two major dimensions that combine to form a

person's total job satisfaction. The two dimensions are described as situational characteristics and situational occurrences. The theory holds that situational characteristics, such as pay, company policy, supervision and working conditions, are the major factors people consider when first evaluating a new job. Likewise, companies tend to emphasize the situational characteristics during the recruiting process. Situational occurrences however, events such as an unexpected nuisance like a broken machine, a rude remark, an unexpected reward or a thank you from the boss, do not get evaluated until after the employee is on the job.

Quarstein et al. (1992) note that the situational characteristics tend to be more enduring and slower to change whereas the situational occurrences are transitory and can change very quickly. Additionally, the cost of changing situational characteristics and ease of implementing such changes can be rather difficult. However, situational occurrences can usually be changed quickly and cheaply.

Quarstein et al. (1992) note that employee reactions to either of these dimensions is rather different. In the example of a situational characteristic, a change in pay for example, would expectedly evoke an immediate reaction. A situational occurrence however, such as a reserved parking space that is taken, might not cause immediate job dissatisfaction. Over time of course, repeated, frequent situational occurrences may have a cumulative effect on the satisfaction equation.

Quarstein et al. (1992) point out that any similarity to Herzberg's two-factor theory and the situational occurrences theory is only that. Unlike Herzberg's theory that contends there are two dimensions: satisfaction and dissatisfaction, the situational occurrences theory argues that there is only one continuum of job satisfaction that is influenced by the two dimensions of situational characteristics and situational occurrences.

In their study Quarstein et al. (1992) examined the Situational Occurrences Theory. Their findings included support for the theory in that situational characteristics and situational occurrences both affected job satisfaction. Their analysis included a regression model that resulted in an $R = .679$ ($p < .01$).

The situational occurrences theoretical framework while similar in some respects to Vroom's expectancy model, is rather weak in explaining the relative weight of the different types of events, be they occurrences or characteristics, and how much or how little they influence job satisfaction. It also does not account for the effect of time a person stays on a job for say five or ten years. One might reasonably speculate that the situational characteristics do indeed become maintenance factors, as Herzberg would argue, and that it is only the situational occurrences that serve to increase or decrease job satisfaction.

The foregoing review of the literature introduced the various definitions, measurements, and determinants of job

satisfaction most often found in the literature. The three types of focuses used to study job satisfaction were then explained. The focuses include (a) the person, (b) the environment, and (c) the person-environment fit. Two determinants of job satisfaction were reviewed, tenure and self rated performance (SRP). The major theories were then discussed including Herzberg's motivation-hygiene theory, Vroom's expectancy theory, Dawis and Lofquist's work adjustment theory, equity theory, reference group theory, discrepancy theory, and situational occurrences theory.

Chapter 3

Methods

The purpose of this chapter was to present the methodological issues of the study, including research design, instrument selection, sample selection, measurement procedures, definition of variables, data collection procedures and data analysis.

Research Design

A correlational design was selected for this study in order to construct a comprehensive model describing job satisfaction using multiple regression and frequency methods. The regression procedure was especially appropriate in that it enables the researcher to simultaneously consider several independent variables and measure their influence on the dependent variable of interest, namely job satisfaction. Kerlinger and Pedhazur (1973) make a most convincing case for the use of multiple regression in the behavioral sciences as they explained:

The traditional view of research amounts to studying the relation between one independent variable and one dependent variable, studying the relation between another independent variable and the dependent variable, and so on, and then trying to put the pieces together One simply cannot understand and explain phenomena in this way because of the complex interaction of independent variables as they impinge on dependent variables. (p.4)

A related appeal for the exploration of multivariate relationships in the study of job satisfaction was made by Guion (Cited in Cranny et al., 1992). He posited that although there is seemingly a plethora of research on job satisfaction, much of the literature is littered with "little papers", the implication that bivariate studies do not adequately investigate the complex issues of job satisfaction and personal characteristics.

The main thrust of the design of this study was to explore the multivariate relationships of job satisfaction in a theory driven fashion. Kerlinger and Pedhazur (1973) stated that an oft cited criticism of the multiple regression approach is that it encourages a "shotgun" approach to entering in variables and seeing what happens. And though that may well be true in some cases, it was the intent of this research that the variables of interest selected for study were grounded in previous research and theory as outlined in the review of the literature.

Research Questions

The following research questions were investigated in this study:

1. Which personal, environmental and P-E fit factors will predict job satisfaction?
2. What are the most significant job descriptors for hospital CEO's?
3. Will there be a statistically significant difference in job satisfaction between higher paid CEO's and lower paid CEO's?
4. Will there be a statistically significant difference between

intrinsic job satisfaction and extrinsic job satisfaction?

5. Will there be a statistically significant difference between intrinsic and extrinsic satisfaction, self rated performance scores, and semantic differential scale scores based upon age and experience?

6. Will there be a statistically significant relationship between job satisfaction and tenure?

Conceptual Framework

As figure 5 illustrates, the study's design encompasses variables from all three focuses typically used in the study of job satisfaction. The conceptual model depicts the various interactions and effects of person traits, environmental traits and P-E Fit traits on intrinsic and extrinsic rewards, and the effects of rewards upon job satisfaction. As presented in Chapter 2, each of the focuses underlie the various theories discussed. Each of the independent variables selected for study account for some of the influences on job satisfaction. However many questions remain unresolved, the least of which is how well will such a multidimensional model predict job satisfaction. The methodology suggests that a multidimensional approach offers the greatest prospect for uncovering new relationships, or relationships that may be moderated or insignificant when other variables are controlled.

Conceptual Model of Job Satisfaction

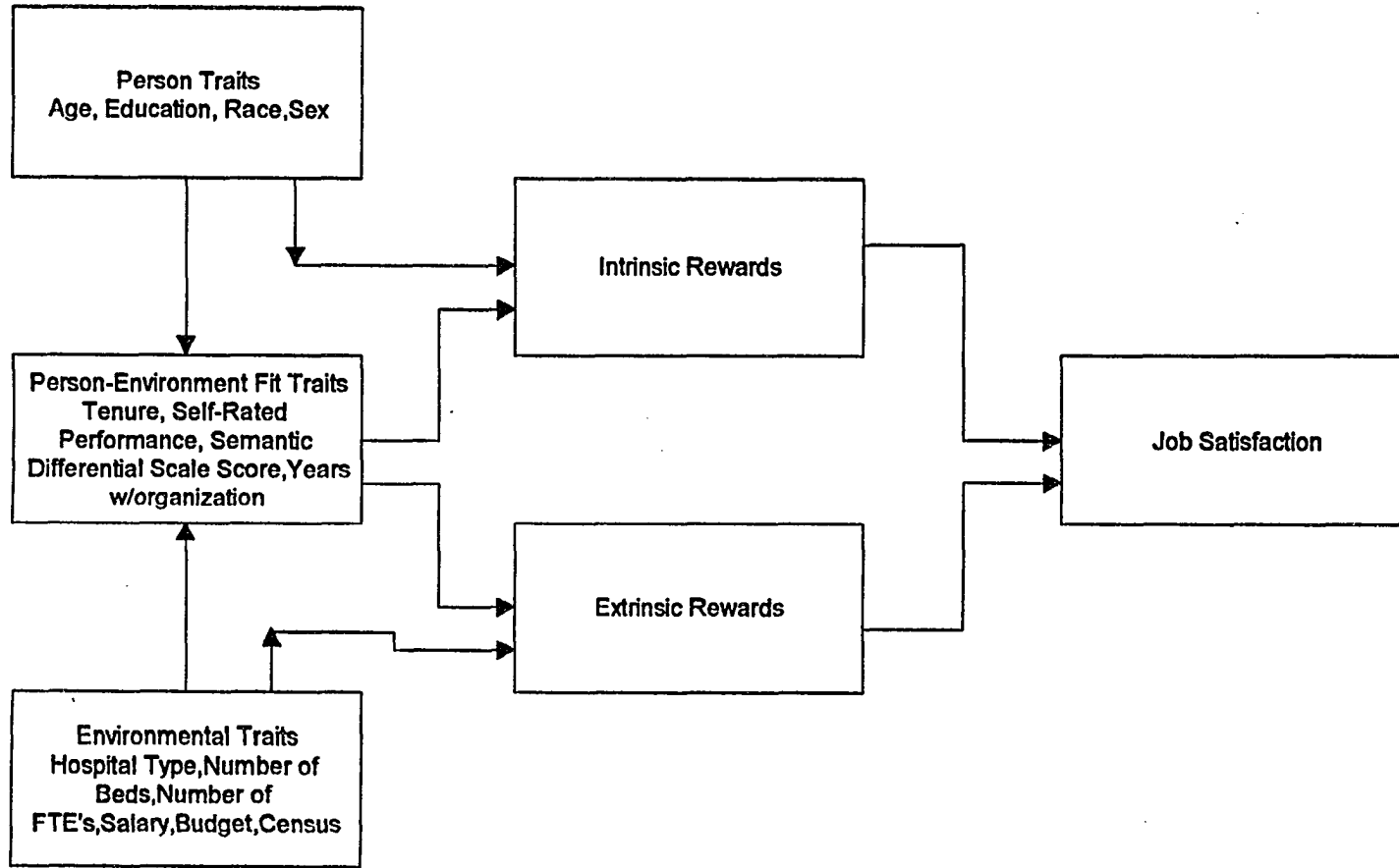


Figure 5

Sample Population

The population of interest was all hospital Chief Executive Officer's (CEO's) in Virginia. This population was selected because it is broad based in terms of hospital types (profit/non-profit; government/non-government; urban/rural). The sample was the entire population of hospital CEO's as listed in the membership roles for 1993 by the Virginia Hospital Association. The membership of the Virginia Hospital Association includes all general acute care hospitals, approximately half of all rehabilitation hospitals, and approximately half of all psychiatric hospitals in the state¹. The total sample size was 119 persons, an adequate number for multiple regression (Kerlinger & Pedhazur, 1973).

Instrumentation

The instrument for the study is a four-part, self-administered questionnaire (Dawis, 1987) that addressed four major areas (see appendix a). The first section elicited demographic data about the CEO and his/her particular hospital. The second section asked CEO's to rank their own performance (SRP) on ten items along a five point scale and an eleventh item ranking their overall performance along a five point Thurstone scale. The third section was the Minnesota Satisfaction Questionnaire (MSQ) short form, a twenty item job satisfaction instrument with a five point Likert scale. The fourth section was a semantic differential with a seven point Likert scale used

to describe the concept of hospital CEO and as an exploratory measure of person-environment fit.

CEO and Hospital Demographics

The variables of interest in this section of the survey included age, gender, race, education, tenure, years of experience as a hospital administrator, years with current organization, number of CEO positions held, salary, hospital type, number of full time equivalents (FTE's), number of inpatient beds, average daily census, number of assistants, average staff turnover, annual hospital budget, and estimated market share. The level of measurement for the variables age, education, tenure, experience, years with current organization, number of CEO positions held, FTE's, number of inpatient beds, average daily census, number of assistants, average staff turnover, annual budget and market share is interval level. Hospital type is broken down into three dichotomies: government/non-government; for profit/not-for-profit; and urban/rural. The variables gender and race are nominal level measures. Salary is measured on an ordinal level and is similar to previous measures of hospital CEO salaries (Hospital CEO Turnover, 1991; Lampert, 1992). The mid-points on the ten-point scale range from \$125,000 - \$150,000 and \$150,001 - \$175,000. This encompasses the average 1991 reported salary of hospital CEO's of \$131,000 (Wagner, 1993) and is close to the average 1992 reported salary of mid-sized hospital CEO's of \$191,200 (Greene,

1993). Although the use of ordinal level of measurement is sometimes criticized when used in multiple regression Cohen and Cohen (1983) defend its use, "...neither measurement error nor inequality of intervals precludes the use of polynomial MRC, despite some formal assumption violation of the fixed regression model. In practice, ordinal scales, as well as those that seek (not necessarily successfully) to yield interval or ratio level measurement, may be profitably employed " (p.241). Further evidence in support of ordinal measures in multiple regression is offered in Davison and Sharma's study (1990) and Jaccard, Turrisi and Wan (1990).

Self Rated Performance (SRP)

The study of self-rated performance (SRP) as a determinant of job satisfaction has been extremely limited and the findings appear to be rather conflicting. The measurement of an individual's own performance unlike other measures that may be less obtrusive and perhaps more objective is only achieved by asking the person directly, how do you think you are doing? A recent study by Hart et al. (1993) of rural hospital CEO's utilized a ten item questionnaire based upon a five point Thurstone scale ranging from very poor, poor, average, good and very good (See appendix A). A summative score was calculated from the 10 items. An eleventh item asked the respondents to rate their overall performance. Approval to duplicate this methodology was received from the study's author. A study by

Vance, MacCallum, Coovert & Hedge (1988) found that the construct validity of performance measures taken from supervisors, peers and self is equally valid across all three sources.

Semantic Differential Scale

The origin of the semantic differential technique of measurement is attributed to Charles E. Osgood. The methodology is well established and its reliability and validity well documented in the literature (Snider & Osgood 1969; Nunnally, 1967; Brown-Harvey, 1992). Brown-Harvey (1992) reported alpha reliability coefficients for four semantic differential scales developed as .54, .67, .84, and .94. Face validity for the instrument in this study was established by a purposive sample of local healthcare executives who were asked to critique the instrument for content, clarity and relevance. Osgood et al. (1957) and Herr (1986) stated that face validity is established because "the distinctions it provides correspond with those which would be made by most observers without the aid of instruments" (cited in Brown-Harvey 1992, pp.49-50).

In the example below the concept being measured (football) is stated and beneath that concept is a list of polar adjectives along a seven point scale that the respondent uses to describe the concept. The respondent marks closest to the word that best describes the concept being measured. A random ordering of word pairs in the actual instrument is employed as a precaution against possible response set behavior. (See appendix a).

Football

good	<u> X </u>	:_____	:_____	:_____	:_____	:_____	:_____	bad
slow	_____	:_____	:_____	:_____	:_____	:_____	: <u> X </u>	fast
sharp	_____	: <u> X </u>	:_____	:_____	:_____	:_____	:_____	dull
clean	_____	:_____	:_____	:_____	:_____	:_____	: <u> X </u>	dirty
blue	_____	:_____	:_____	: <u> X </u>	:_____	:_____	:_____	green

A post hoc factor analysis using varimax rotation was conducted to explore any factors upon which the polar adjectives load significantly. Nunnally (1967) stated that the varimax procedure will explain the greatest amount of the variance for a given set of factors and is the best all purpose method for essentially distilling many variables into meaningful constructs. Cattell (1978) cautioned however that the varimax procedure may not always "split up" the first factor. Hakstian and Abell (1974) illustrated the problem of which factor rotation method to select in commenting "no single...procedure can be expected to lead to optimal solutions for all kinds of data" (cited in Cattell 1978, p.139). Nunnally (1967) concluded that "...the varimax method has proved very successful and...the solution usually is close enough to greatly reduce the labor of finding a satisfactory rotation" (p. 333).

Job Satisfaction

The instruments available for the measurement of job

satisfaction are varied and many. However, the Minnesota Satisfaction Questionnaire (MSQ) Short Form was selected for three primary reasons. First, the MSQ has the ability to measure both intrinsic and extrinsic satisfaction. Intrinsic satisfaction is measured on items 1,2,3,4,7,8,9,10,11,15,16,20; extrinsic satisfaction is measured on items 5,6,12,13,14,19 (Weiss, Dawis, England & Lofquist, 1967, p.4). The measure of both these dimensions was of particular interest in this study especially in relation to Lawler and Porter's Expectancy Theory and the role of intrinsic satisfaction in their theory. Second, the MSQ has been widely reported as valid and reliable and has been used previously in a variety of settings. The reported "median reliability coefficients were .86 for Intrinsic Satisfaction, .80 for Extrinsic Satisfaction and .90 for General Satisfaction" (Weiss et al. 1967, p.24) . These reliability estimates are well above the minimum of .70 as suggested by Nunnally (1967). Thirdly, the MSQ is primarily cognitive in its measure of job satisfaction (Moorman, 1993). Other available measures of job satisfaction such as the Faces scale or the Job Descriptive Index are not as cognitive in their measure, with those instruments having a greater measure of affective influences. Cognitive measures are "based on a more logical and rational evaluation of the job conditions" (Moorman, 1993, p. 761) Affective measures are based on emotional aspects of the job situation. Cognitive measures are less transient than affective measures and therefore the MSQ would be most

appropriate for the purposes of this study. Stated simply, the likelihood of having a respondent reporting low job satisfaction because he is in a bad mood that particular day is less likely using an instrument such as the MSQ. Permission to photocopy and include the MSQ was requested and approved (appendix b).

P-E Fit

The measurement of Person-Environment fit using the semantic differential scale score technique was an exploratory procedure. As highlighted in the review of the literature measurement of P-E fit is an elusive goal. Holland (1987) suggests giving as much attention to the environment as to the person in future P-E fit research. To that end the semantic differential method allows measurement of how the person sees himself in the environment. Furthermore it is an improvement over the D^2 method. The D^2 method is described by Rounds, Dawis, and Lofquist (1987) as a difference score between a measure of the person and a measure of the environment. The D^2 method they note is "problematic ... in the context of ... any link to particular P-E fit theories" (p.299).

Procedures

Each subject was mailed a survey form accompanied with a letter explaining the importance of the study (Dillman, 1978) and thanking them for their cooperation (see appendix c). As suggested by Babbe (1989) a separate post card with the subject's

name was included in the mailing that the respondent was asked to return separately, indicating he had completed the survey. This method preserves anonymity yet facilitates tracking of who responded so follow up mailings can be targeted only to non-respondents. The survey ran for 23 days, with a follow up post card reminder mailed at day 12 and a third mail out of a complete package of survey materials and a second cover letter (appendix d) at day 16 to all known non-respondents. Each respondent received a survey form (appendix a), a reply post card, and a stamped self-addressed envelope. All respondents who returned the reply card were sent a post card acknowledging their reply and thanking them for their participation.

Analysis

Descriptive statistics were calculated for all demographic data. Multiple regression coefficient was calculated using SPSS-X, a statistical software package. Job satisfactions measured by the MSQ were entered as the dependent variable using forced entry multiple regression procedure with the following variables: tenure, beds, total SRP score, and total semantic differential scale score. Forced entry of the variables of interest was selected in order to evaluate the total variance explained by the model and the relative significance that each variable contributes. Research questions were addressed as outlined in Figure 6. Cronbach's alpha was calculated for the semantic differential scale, the self rated performance instrument, the

total MSQ score, the intrinsic MSQ score and the extrinsic MSQ score. The following semantic differential adjective pairs were recoded in reverse order during all data analysis and presented in their recoded form in Chapter 4:

Good/Bad; Valuable/Worthless; Strong/Weak; Active/Passive;
Kind/Cruel; Clear/Fuzzy; Happy/Sad; Order/Chaos; Young/Old;
Pleasant/Unpleasant; Important/Unimportant; Consensus/Dissent;
Decisive/Ponderous.

Figure 6

Research Question	Variables	Analysis
1. Which personal, environmental, and P-E fit factors will predict job satisfaction?	MSQ	Multiple Regression
2. What are the most significant job descriptors for hospital CEO's?	Semantic Differential Scale(SDS)	Factor Analysis
3. Will there be a statistically significant difference in job satisfaction between higher paid and lower paid CEO's?	MSQ	One-sample t test
4. Will there be a statistically significant difference between intrinsic and extrinsic satisfaction?	MSQ	Paired t-test
5. Will there be a statistically significant difference between intrinsic and extrinsic satisfaction, Self Rated Performance scores, and Semantic Differential Scales Scores based upon age and experience?	MSQ/SRP/SDS	Anova
6. Will there will be a statistically significant relationship between job satisfaction scores and tenure?	MSQ	One-sample t test

Chapter 4

Presentation and Analysis of Data

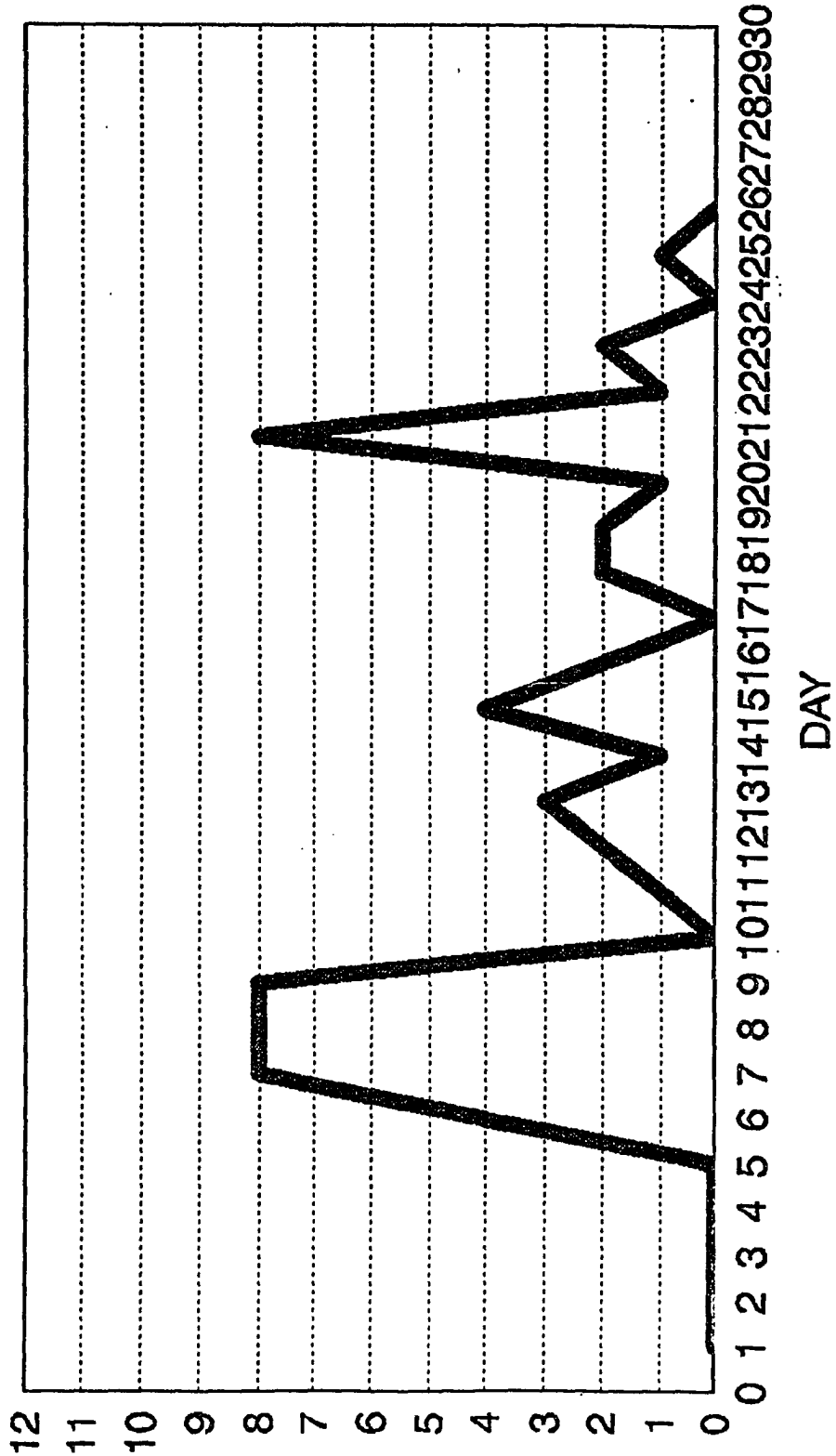
The purpose of this chapter was to present the data and analyze the various relationships discussed in the research questions. The analysis will include the following five major areas: (1) response rate; (2) frequency data of the study sample; (3) descriptive statistics for Self Rated Performance (SRP) scales, Semantic Differential scales, and the Minnesota Satisfaction Questionnaire (MSQ); (4) reliability statistics; and (5) addressment of the research questions.

Response Rate

A total of 119 surveys were mailed on day one of the study. One survey was returned because the position was vacant, reducing the total sample size to 118. The study ran for 23 days with two follow-up mailings at day 12 and day 16. The response rate is depicted in Figure 7. A total of 59 surveys were returned. The total response rate was 50 percent, more than twice the response rate (20%) of a similar 1993 study of hospital CEO's in Texas (Santerre & Thomas, 1993). One respondent refused to complete the semantic differential scale and missing values were assigned to those items on the semantic scale. Four surveys were returned after the deadline and not used in the analysis. One respondent refused to complete the survey because it "elicited too much demographic information". A total of 54 surveys were used in the

Response rate

Figure 7



*post card mailed day 12/ 2nd set survey materials mailed day 16

analysis. Although there is no certainty in the representativeness of the study's respondents to the actual population of Virginia hospital CEO's and their respective facilities, one known measure of the population's hospitals is the average number of inpatient beds. The Commonwealth's average inpatient beds is 218.5 beds while the study's mean number of inpatient beds was 215.5.

Description of the Sample

The personal and organizational characteristics variables for the respondents (n = 54) are presented in this section. Table 2 summarizes the data.

The age of the respondents ranged from 35 to 64 with the majority of respondents falling between the ages of 40 and 50 (44.4%, n = 24). Fifty-one of the respondents were male (94.4%), n = 51). One hundred percent of the respondents were Caucasian.

The majority of respondents reported post high school education of six years (55.6%, n = 30). The ranges of reported total experience as a hospital administrator ranged from 33% reporting less than seven years experience to 20% reporting greater than 21 years experience. Salary ranges included 24% reporting a salary from \$75,000 - \$100,000 (n= 13), 24% reporting a salary from \$125,001 - \$150,000 (n = 13), and 1.9% (n = 1) reporting a salary from \$200,001 - \$225,000.

Seventy-six percent of the respondents reported their hospital as not-for-profit (n = 41). The question for hospital

Table 2

Percentage and Frequency Distributions of Selected Personal and Organizational Characteristics of the Respondents

(N = 54 Unless indicated Otherwise)

Variables	Attributes	N	%
1. Age	< 40	13	24.1
	≥ 40 < 50	24	44.4
	≥ 50	16	29.6
	Missing	1	1.9
2. Experience as a hospital administrator	< 7 years	18	33.3
	≥ 7 years < 14 years	14	25.9
	≥ 14 years < 21 years	11	20.4
	≥ 21 years	11	20.4
3. Gender	Female	3	5.6
	Male	51	94.4
4. Race	Caucasian	54	100
5. Number of years education post high school	2	1	1.9
	4	6	11.1
	5	3	5.6
	6	30	55.6
	7	7	13.0
	8	4	7.4
	9	1	1.9
	10	1	1.9
6. Most Recent Salary per year	14	1	1.9
	\$50,000 - \$75,000	9	16.7
	\$75,001 - \$100,000	13	24.1
	\$100,001 - \$125,000	8	14.8
	\$125,001 - \$150,000	13	24.1
	\$150,001 - \$175,000	3	5.6
	\$175,001 - \$200,000	5	9.3
	\$200,001 - \$225,000	1	1.9
Missing	2	3.7	

Table 2

Percentage and Frequency Distributions of Selected Personal and Organizational Characteristics

Variables	Attributes	N	%
7. Hospital type	Government	9	16.7
	Non-government	14	25.9
	Missing	31	57.4
	For profit	7	13.0
	Not-for-profit	41	75.9
	Missing	6	11.1
	Urban	6	11.1
	Rural	14	25.9
	Missing	34	63.0

type was poorly constructed with 57% missing responses for the government/non-government item and 63% missing responses for the urban/rural item.

Descriptive Statistics for Instrument Responses

This section presents descriptive statistics for item responses for each of the four major sections of the instrument: (1) Demographic Data (2) Self Rated Performance (SRP); (3) Semantic Differential Scale; and (4) The Minnesota Satisfaction Questionnaire (MSQ). The data included the range, mean, median and standard deviation for each item response. Tables 3 to 6 summarize these results.

Demographic Data

The mean age of the respondents was 47 years. The mean educational level post high school was 6.2 years. The mean tenure was 6.2 years. The mean number of years as a hospital administrator was 14. The mean number of inpatient beds was 215.5. The mean number of Full Time Equivalents (FTE's) employed was 920.

Self Rated Performance

The total score for the 10 item questionnaire on performance ranged from 33 to 47. A higher score indicated better performance. The mean score for total performance was 40.63. The standard deviation was 3.52. The respondents rated their performance rather well with no one rating themselves as poor in any of the ten areas.

Table 3

**Ranges, Means, Medians and Standard Deviations
For Selected Demographic Variables**

Item	Range	Mean	Median	S.D.
Age	35 - 65	46.98	46	7.95
Number of Years Education Post High School	2 - 14	6.20	6.0	1.69
Number of Years in Current Position (Tenure)	1 - 23	6.20	4.0	5.87
Number of Years as a Hospital Administrator (Experience)	1 - 36	13.93	11.50	8.97
Number of Years With Current Organization	1 - 26	11.89	10.00	7.62
Number of CEO Positions Held	1 - 8	1.92	1.0	1.47
Salary	2 - 8	4.13	4.0	1.62
Number of FTE's Employed (Full time equivalent)	70 - 5050	919.96	510.0	1128.74
Number of Inpatient Beds	25 - 950	215.5	136.0	196.09
Census	12 - 665	137.8	70.0	152.7
Number of Administrative Assistants and Associate Administrators	0 - 15	3.38	3.0	2.97
Average Staff Turnover (percent)	0 - 55	13.45	12.0	10.35
Hospital Budget(\$)	20M - 380M	76.2M	49M	8.6M
Estimated Market Share (percent)	6 - 98	51.44	59.0	24.67

Table 4

Ranges, Means, Medians and Standard Deviations
For Each Self Rated Performance Item

Item	Range	Mean	Median	S.D.
Employee & Staff Relations	3 - 5	4.35	4.0	.71
Managerial Team Building	3 - 5	4.35	4.0	.65
Medical Provider Relations	3 - 5	4.28	4.0	.59
Finance	3 - 5	4.17	4.0	.64
Physician Recruitment	2 - 5	4.14	4.0	.69
Public Relations	3 - 5	4.13	4.0	.80
Budgeting	2 - 5	4.06	4.0	.74
Quality Review	2 - 5	4.02	4.0	.64
Marketing	2 - 5	3.94	4.0	.79
Information System Management	2 - 5	3.5	4.0	.72
Overall Performance	3 - 5	4.20	4.0	.53
Total Performance (Sum of items 1 - 10)	33 - 47	40.63	41.0	3.52

Table 5

Ranges, Means, Medians and Standard Deviations
For Each Semantic Differential Scale Item

Adjective Pair	Range	Mean	Median	S.D.
Passive - Active	5 - 7	6.53	6.0	.64
Worthless - Valuable	4 - 7	6.43	6.0	.67
Weak - Strong	5 - 7	6.40	6.0	.66
Detached - Involved	3 - 7	6.32	6.0	.85
Unsuccessful - Successful	4 - 7	6.28	6.0	.69
Manager - Leader	2 - 7	6.28	6.0	.89
Bad - Good	4 - 7	6.23	6.0	.83
Cruel - Kind	4 - 7	6.23	6.0	.89
Impersonal - Personal	4 - 7	6.21	6.0	.72
Simple - Complex	3 - 7	6.19	6.0	1.00
Individual - Team	1 - 7	6.17	6.0	.83
Unimportant - Important	4 - 7	6.17	6.0	.80
Unfair - Fair	4 - 7	6.11	6.0	.99
Unpleasant - Pleasant	4 - 7	5.93	6.0	.94
Unrealistic - Realistic	2 - 7	5.91	6.0	.93
Pessimistic - Optimistic	3 - 7	5.90	6.0	1.02
Sad - Happy	4 - 7	5.90	6.0	.82
Slow - Fast	4 - 7	5.89	6.0	.90
Dissent - Consensus	4 - 7	5.87	6.0	.81
Ponderous - Decisive	3 - 7	5.76	6.0	.96
Frustrating -Rewarding	3 - 7	5.49	6.0	1.25
Short-term - Long-term	2 - 7	5.47	6.0	1.09
Deregulated - Regulated	1 - 7	5.42	6.0	1.57
Control - Guide	2 - 7	5.40	6.0	1.41
Fuzzy - Clear	2 - 7	5.25	5.0	1.11
Legal - Ethical	2 - 7	5.15	5.0	1.37
Process - Outcome	1 - 7	5.09	5.0	1.58
Chaos -Order	2 - 7	5.06	5.0	1.38
Old - Young	2 - 7	4.59	4.0	1.20
Subtle - Obvious	2 - 7	4.47	4.0	1.17
Tense - Relaxed	1 - 7	3.94	4.0	1.65
Decentral - Central	1 - 7	3.47	3.0	1.54
Public - Private	1 - 7	2.74	2.0	1.72
Administrative - Clinical	1 - 5	2.42	2.0	1.06
Aggressive - Defensive	1 - 6	2.42	2.0	1.18
Future - Present	1 - 5	2.21	2.0	1.04
Present - Past	1 - 4	1.89	2.0	.82
Total Semantic Differential Scale Score	168 - 222	192.96	193.0	11.46

Legend: Adjective on left always scored as one/Adjective on Right always scored as seven

Table 6

Ranges, Means, Medians and Standard Deviations
For Each Minnesota Satisfaction Questionnaire

<u>MSQ Item</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>S.D.</u>
Do Different	3 - 5	4.59	5.0	.60
Keep Busy	3 - 5	4.57	5.0	.54
Do For Others	3 - 5	4.53	5.0	.54
Abilities	3 - 5	4.51	5.0	.54
Judgement	2 - 5	4.39	4.0	.66
Own Methods	3 - 5	4.39	4.0	.57
Feel Accomplishment	2 - 5	4.39	4.0	.63
Work Conditions	2 - 5	4.33	4.5	.82
Conscience	2 - 5	4.28	4.0	.71
Be Somebody	2 - 5	4.19	4.0	.78
Steady Job	1 - 5	4.09	4.0	.98
Coworkers	1 - 5	3.93	4.0	.90
Work Alone	2 - 5	3.82	4.0	.68
Pay	1 - 5	3.79	4.0	.95
Policies	1 - 4	3.77	4.0	.91
Advancement	1 - 5	3.77	4.0	.88
Praise	1 - 5	3.76	4.0	.95
Supervisor's Competence	2 - 5	3.76	4.0	.88
Boss	2 - 5	3.63	4.0	.78
Tell People	1 - 5	3.39	3.0	.70
<hr/>				
Total Satisfaction Score	61 - 91	80.26	81.0	7.27
Intrinsic Satisfaction Score	38 - 58	50.57	51.0	4.53
Extrinsic satisfaction Score	11 - 27	21.52	22.0	3.50

Semantic Differential Scale

The total score for the 37 item Semantic Differential Scale ranged from 168 to 222. A higher score indicated a more positive affect towards the concept of hospital CEO. The five highest mean scores were for adjective pairs: (1) passive-active (6.53); (2) worthless-valuable (6.43); (3) weak-strong (6.40); (4) detached-involved (6.32); and (5) unsuccessful-successful and manager-leader (6.28). The five lowest mean scores were for adjective pairs: (1) present-past (1.89); (2) future-present (2.21); (3) aggressive-defensive (2.42); (4) administrative-clinical (2.42); and (5) public-private (2.74)

Minnesota Satisfaction Questionnaire

Three composite scores were calculated: (1) overall job satisfaction; (2) intrinsic job satisfaction; and (3) extrinsic job satisfaction. A higher score indicated greater job satisfaction. The mean score for overall job satisfaction was 80.26. The five items with the highest mean scores were: (1) do different; (2) keep busy; (3) do for others; (4) abilities; and (5) judgment. The scores for overall job satisfaction ranged from 61 to 91. The scores for intrinsic satisfaction ranged from 38 to 58. The scores for extrinsic satisfaction ranged from 11 to 27.

Reliability Estimates for Instrument Scales

Cronbach's alpha reliability estimates were calculated for the following scales: (1) the Self Rated Performance scale (items

1 through 10); (2) the Semantic Differential scale (items 1 through 37); (3) Total Satisfaction Score (MSQ items 1 through 20); (4) Intrinsic Satisfaction (MSQ items 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, 20) ; and (5) Extrinsic Satisfaction (MSQ items 5, 6, 12, 13, 14, 19). Reliability estimates are displayed in Table 7.

Reliability estimates for all the three satisfaction measures were all high and above the minimums ($> .70$) suggested by Nunally (1967). Coefficient alpha for the Self Rated Performance scale was .61, .68 for the Semantic Differential Scale, and .59 for the extrinsic satisfaction scale suggesting some measurement error. Caution is therefore appropriate when interpreting these three scales.

Addressment of Research Questions

Research Question 1

Which personal, environmental, and Person-Environment Fit traits will predict job satisfaction? Table 8 presents the results of the multiple regression analysis. Because of the relatively small sample size ($n = 54$) analysis was limited to those variables considered to be either the most potent in representing a traits or the most theoretically useful. Borg and Gall (1983) stated that a minimum of 10 to 15 subjects per independent variable is appropriate for multiple regression. Accordingly the model was limited to four variables. Selected

Table 7

Reliability Estimates for Self Rated Performance, Semantic Differential Scale, Total Job Satisfaction, Intrinsic Job Satisfaction, and Extrinsic Job Satisfaction

Scale	Cronbach's alpha
Self Rated Performance	.61
Semantic Differential	.68
Total Job Satisfaction	.79
Intrinsic Job satisfaction	.74
Extrinsic Job satisfaction	.59

Table 8

**Multiple Regression Model For Predicting Which Traits
(Person, Environment, Person-Environment Fit)
Best Predict Job Satisfaction**

Variable	B	Beta	T	Significance of T
Total SRP Score	.094	.047	.378	.7074
Number of Inpatient Beds	-.002	-.070	.589	.5589
Tenure	.175	.148	1.26	.2137
Total Semantic Scale Score	.320	.529	4.30	.0001
Constant	14.39			

Multiple R	= .598
R Square	= .358
Adjusted R Square	= .304
Standard Error	= 5.775

for entry into the equation were: (1) Total Self Rated Performance (SRP) score (person trait); (2) Beds (environmental trait); (3) Total Semantic Differential Scale score (P - E fit trait); and (4) Tenure (P - E fit trait). These four variables were selected because it was felt they each best represented the most significant characteristic from each of the three traits being studied.

The variable representing the total Semantic Differential scale score was the only item that entered significantly into the regression equation ($t(4)=4.30, p <.0001$). The overall model explained approximately 35% of the variance ($R \text{ square} = .358$). However, caution is appropriate when interpreting these results in that three of the four variables (total SRP score, number of beds, and tenure) did not have significant p values ($p >.05$). Analysis of residuals was performed in order to ensure the assumptions for multiple regression were met as suggested by Norusis (1990). All assumptions for normal distribution of the residuals, constant variance and linearity were met. From this model there is moderate support for a finding that P - E fit traits best predicts job satisfaction.

Research Question 2

What are the most significant job descriptors for hospital CEO's? A factor analysis was performed on the 37 items on the semantic differential scale. The results are presented in Table 9. Factor analysis using the Varimax procedure extracted 10

Table 9

Factor Scores for Semantic Differential Scale Adjective Pairs

Adjective Pair	Factor										H ²	
	1	2	3	4	5	6	7	8	9	10		
Public - Private	-.44	-.41										.64
Administrative - Clinical			-.46									.60
Simple - Complex		.58		-.49								.75
Deregulated - Regulated		.49										.75
Individual - Team		.54										.77
Impersonal - Personal					.58							.69
Bad - Good	.49											.69
Unfair - Fair	.59											.68
Worthless - Valuable	.42		.47									.80
Detached - Involved		.41			.43							.78
Weak - Strong	.60					.56						.80
Passive - Active	.53					.53						.83
Cruel - Kind			.51									.66
Slow - Fast			-.55									.66
Pessimistic - Optimistic	.51								-.45			.79
Decentral - Central							.48					.74
Fuzzy - Clear	.71											.81
Unsuccessful - Successful	.69											.72
Subtle - Obvious							.40			.58		.85
Tense - Relaxed		-.67										.73
Present - Past	-.48		.45									.80
Sad - Happy	.72											.80
Unrealistic - Realistic					.52							.72
Process - Outcome					.43							.62
Frustrating - Rewarding	.70							.50				.78
Chaos - Order	.43		.40									.74
Old - Young			-.46		.44							.66
Unpleasant - Pleasant	.73											.79

Table 9

Factor Scores for Semantic Differential Scale Adjective Pairs

Adjective Pair	Factor										H ²	
	1	2	3	4	5	6	7	8	9	10		
Future - Present			.40		.46							.71
Aggressive - Defensive	-.56				.46							.78
Manager - Leader	.56											.75
Unimportant - Important	.43	.43					.40					.72
Dissent - Consensus		.47										.69
Legal - Ethical	.45				.40				.44			.69
Short-term - Long-term							-.52					.80
Control - Guide					.54							.75
Ponderous - Decisive	.52								.41			.80
% of Variance	20.2	9.3	7.5	6.6	6.2	5.6	4.8	4.2	3.8	3.2		
Total % of Variance = 71.4												

factors, all with an eigenvalue greater than unity (1.0). The total variance explained by the model was 71.4%.

The first factor accounted for 20.2% of the variance with four variables loading with scores greater than .70: (1) fuzzy/clear (.71); (2) sad/happy (.72); (3) frustrating/rewarding (.70); and (4) unpleasant/pleasant (.73). This factor was labelled the affective factor which relates to the person aspect of the job of hospital CEO.

The second factor accounted for 9.3% of the total variance with three variables loading with scores greater than .50. The variables were: (1) simple/complex (.58); (2) team/individual (.54); and (3) tense/relaxed (-.67). This factor was labelled the cognitive factor which relates to the environmental aspects of the job of hospital CEO.

The third factor accounted for 7.5% of the total variance. Among the highest scores of the variables loading on the third factor were: (1) slow/fast (-.55); and (2) cruel/kind (.51). This factor was labelled the P - E fit factor which relates to how well an individual might fit in the job of hospital CEO.

The fourth factor accounted for 6.6% of the total variance. Among the highest scores of the variables loading on the fourth factor were: (1) control/guide (.54); (2) De-regulated/regulated (-.49); (3) future/present (.46); and (4) aggressive/defensive (.46). This factor was labelled the power factor.

The fifth factor accounted for 6.2% of the total variance. Among the highest scores of the variables loading on the fifth

factor were: (1) impersonal/personal (.58); (2) unrealistic/realistic (.52); and short-term/long-term (.52). This factor was labelled the emotive factor.

The sixth factor accounted for 5.6% of the total variance. Among the highest scores of the variables loading on the sixth factor were: (1) weak/strong (.56); and passive/active (.53). This factor was labelled as the stamina factor.

The seventh factor accounted for 4.8% of the total variance. Among the highest scores of the variables loading on the seventh factor were: (1) de-central/central (.48); (2) subtle/obvious (.40); and (3) consensus/dissent (.40). This factor was labelled as the organizational factor.

The eighth factor accounted for 4.2% of the total variance. Among the highest scores of the variables loading on the eighth factor were: (1) ponderous/decisive (.50); (2) chaos/order (-.45); and (3) pessimistic/optimistic (.41). The eighth factor was labelled the disposition factor.

The ninth factor accounted for 3.8% of the total variance. A single variable loaded on the ninth factor: legal/ethical (.44). This factor was labelled the morality factor.

The tenth factor accounted for 3.2% of the total variance. A single variable loaded on the tenth factor: future/present (.58). This factor was labelled the outlook factor.

Among the 37 word pairs the three highest communality scores were for the pairs: (1) subtle/obvious (.85); (2) passive/active

(.83); and (3) fuzzy/clear (.81).

Research Question 3

Will there be a statistically significant difference in job satisfaction between higher paid CEO's and lower paid CEO's? The results of a one-sample t-test are presented in Table 10. The findings $\{t(50) = -.64, p > .05\}$ do not support a finding of a significant difference in the job satisfaction between higher paid and lower paid CEO's.

The salary variable was dichotomized into two categories: (1) lower paid CEO's, those who reported a salary level below the mean response of 4.135; which approximates the salary level \$100,000 - \$125,000 and (2) higher paid CEO's, those who reported a salary above the mean response.

Research Question 4

Will there be a statistically significant difference between intrinsic and extrinsic satisfaction? A paired t-test was used to evaluate this relationship. The results are presented in Table 11.

The results $\{t(53) = 42.44, n.s\}$ found no statistically significant difference between total intrinsic satisfaction scores and total extrinsic satisfaction scores. However, caution is suggested in interpreting these results in that the Cronbach's alpha reliability estimate for the extrinsic satisfaction scale is .59, below the recommended level of .70 as stated by Nunally (1967). A higher reliability estimate may better detect a significant difference between the two scores.

Table 10

One-Sample T-Test For Higher Paid and Lower Paid CEO's and Total Job Satisfaction Scores

Variable	Number of cases	Mean	S.D.	t Value	D.F.	2-tail Probability (separate variance)
Lower Paid CEO's	30	79.46	7.42	-.64	50	.527
Higher Paid CEO's	22	80.77	7.21			

Table 11

Paired t-test Between Intrinsic and Extrinsic Satisfaction

Variable	Mean	S. D.	t value	D.F.	2-tail Probability
Intrinsic	50.55	4.53	42.44	53	.085
Extrinsic	21.51	3.50			

Research Question 5

Will there be a statistically significant difference between intrinsic and extrinsic satisfaction, total Self Rated Performance scores, and Semantic Differential Scale scores based upon age and experience?

Two analyses evaluated the relationships described in research question five using multiple Anovas. The first analysis collapsed the age variable into three categories: (1) less than 40 years of age; (2) equal to or greater than 40 years and less than 50 years of age; and (3) equal to or greater than 50 years of age. The results of the four Anova's respectively were: (1) intrinsic satisfaction $\{F(2,50)=.4249,n.s.\}$; (2) extrinsic satisfaction $\{F(2,50)=1.45,n.s.\}$; (3) Self Rated Performance $\{F(2,50)=1.28,n.s.\}$; and (4) Semantic Differential $\{F(2,50)=.43,n.s.\}$. There were no significant relationships found among any of the variables of interest for research question five. The results are presented in table 12.

The second analysis evaluated the relationships with the experience variable was collapsed into four categories: (1) less than 7 years experience as a hospital administrator (HA); (2) equal to or greater than 7 years less than 14 years as an HA; (3) equal to or greater than 14 years less than 21 years as an HA; and (4) equal to or greater than 21 years as an HA. The results of the four Anova's respectively were: (1) intrinsic satisfaction $\{F(3,50)=0.6996, n.s.\}$; (2) extrinsic satisfaction $\{F(3,50)=1.7914,n.s.\}$; (3) Self Rated Performance

Table 12

Oneway Analysis of Variance For Age, Intrinsic Satisfaction Scores, Extrinsic Satisfaction Scores, Total Self Rated Performance scores and Total Semantic Differential Scale Scores

(Age collapsed into three categories)

- (1) Age < 40
- (2) Age \geq 40 < 50
- (3) Age \geq 50

Intrinsic Satisfaction by Age

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	18.16	9.08	.4249	.6562
Within Groups	50	1068.93	21.37		

No significant relationship between groups

Extrinsic Satisfaction by Age

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	35.26	17.63	1.45	.2442
Within Groups	50	607.93	12.15		

No significant relationship between groups.

Table 12

Oneway Analysis of Variance For Age, Intrinsic Satisfaction Scores, Extrinsic Satisfaction Scores, Total Self Rated Performance scores and Total Semantic Differential Scale Scores

(Age collapsed into three categories)

- (1) Age < 40
- (2) Age \geq 40 < 50
- (3) Age \geq 50

Total Self Rated Performance Scores by Age

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	31.49	15.74	1.28	.2861
Within Groups	50	613.52	12.27		

No significant relationship between groups.

Total Semantic Differential Score by Age

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	118.51	59.25	.43	.6508
Within Groups	50	6700.00	136.73		

No significant relationship between groups.

{ $F(3,50)=.5304,n.s.$ }; and (4) Semantic Differential { $F(3,50)=.0565,n.s.$ }. There were no significant relationships found among any of the variables of interest for research question five. The results are presented in Table 13.

A summary of the mean scores for the above ANOVA procedures is presented in Table 14.

Research Question 6

Will there be a statistically significant relationship between job satisfaction scores and tenure? This relationship was evaluated by a one-sample t-test. The variable tenure was dichotomized into the categories: (1) Low tenure (< 3 years as CEO); and (2) High tenure (\geq 3 years as CEO). Results of the analysis are presented in Table 15. The results { $t(36)=-1.83,n.s.$ } indicate that there is no statistically significant difference between the high and low tenure CEO's and job satisfaction scores. A post hoc analysis was performed using the collapsed tenure variable and the intrinsic and extrinsic satisfaction scores. These results are also presented in Table 15. The t-test for extrinsic satisfaction and tenure ($t(47)=-.07, p > .942$) did not indicate a statistically significant difference between the high and low tenure groups. A t-test for high and low tenure and intrinsic satisfaction ($t(44) = -2.33, p > .024$) did find a statistically significant difference, with higher satisfaction for the higher tenure group. However, because the alpha level ($p < .05$) is uncontrolled when making multiple comparisons such as these, caution in interpreting

Table 13

Oneway Analysis of Variance For Experience, Intrinsic Satisfaction Scores, Extrinsic Satisfaction Scores, Total Self Rated Performance scores and Total Semantic Differential Scale Scores

(Experience collapsed into four categories:)

- (1) less than 7 years experience as a hospital administrator (HA)
- (2) equal to or greater than 7 years less than 14 years as an HA
- (3) equal to or greater than 14 years less than 21 years as an HA
- (4) equal to or greater than 21 years as an HA.

Intrinsic Satisfaction by Experience

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	43.80	14.60	.6996	.5568
Within Groups	50	1043.53	20.87		

No significant relationship between groups.

Extrinsic Satisfaction by Experience

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	63.03	21.01	1.7914	.1608
Within Groups	50	586.44	11.72		

No significant relationship between groups.

Table 13

Oneway Analysis of Variance For Experience, Intrinsic Satisfaction Scores, Extrinsic Satisfaction Scores, Total Self Rated Performance scores and Total Semantic Differential Scale Scores

(Experience collapsed into four categories:)

- (1) less than 7 years experience as a hospital administrator (HA)
- (2) equal to or greater than 7 years less than 14 years as an HA
- (3) equal to or greater than 14 years less than 21 years as an HA
- (4) equal to or greater than 21 years as an HA.

Total Self Rated Performance Score by Age

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	20.25	6.75	.5304	.6635
Within Groups	50	636.59	12.72		

No significant relationship between groups.

Total Semantic Differential Score by Experience

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	22.53	7.84	.0565	.9821
Within Groups	50	6804.38	138.86		

No significant relationship between groups

Table 14

Summary of Mean Scores by Number of Years Experience as a Hospital Administrator

Item	< 7 years	≥ 7 < 14	≥ 14 < 21	≥ 21
Intrinsic Satisfaction Score	49.50	51.64	51.27	50.18
Extrinsic Satisfaction Score	21.50	21.71	19.72	23.09
Total Self Rated Performance Score	40.44	40.14	41.81	40.36
Total Semantic Differential Score	192.88	193.85	193.00	191.90

Summary of Mean Scores by Age

Item	Age < 40	Age ≥ 40 < 50	Age ≥ 50
Intrinsic Satisfaction Score	50.15	50.16	51.43
Extrinsic Satisfaction Score	21.46	20.70	22.62
Total Self Rated Performance Score	41.84	39.91	40.50
Total Semantic Differential Score	191.41	192.16	195.12

Table 15

One Sample t-test Comparing Job Satisfaction Scores and Tenure

Variable	Number of cases	Mean	S.D.	t-value	D.F.	2-tail prob. (separate variance)
Low Tenure < 3 years as CEO						
High Tenure ≥ 3 years as CEO						
<hr/>						
Total Satisfaction						
Low Tenure	25	78.28	8.98	-1.83	35.93	.076
High Tenure	29	81.96	4.91			
<hr/>						
Intrinsic Satisfaction						
Low Tenure	25	49.04	4.98	-2.33	43.74	.024
High Tenure	29	51.86	3.70			
<hr/>						
Extrinsic Satisfaction						
Low Tenure	25	21.48	3.85	-.07	47.13	.942
High Tenure	29	21.55	3.23			
<hr/>						

such results is advised.

This relationship in research question six is also explored in Table 16. Table 16 depicts several relationships presented using the Pearson Product Moment Correlation. The Pearson R does indicate a relationship between tenure and intrinsic satisfaction with a correlation of .33 significant at $p < .01$. The three highest R values are the correlation between total satisfaction and: (1) intrinsic satisfaction (.85); (2) extrinsic satisfaction (.68); and (3) total Semantic Differential Scale (.57).

Post Hoc Analysis

A post hoc analysis was conducted to further examine the relationship between the total Semantic Differential Scale scores and total job satisfaction scores. The total Semantic Differential Scale score was dichotomized about the mean score (193). Scores less than 193 were categorized as Low Semantic Differential; scores equal to or greater than 193 were categorized as High Semantic Differential.

The relationships between the dichotomized Semantic Differential Scale groups (high and low) and total job satisfaction, intrinsic job satisfaction, and extrinsic job satisfaction were evaluated by t-tests. The results found statistically significant differences between the high and low Semantic Differential Scale groups and their satisfaction on all three types of satisfaction measures: (1) total satisfaction ($t(51) = -5.02, p < .000$); (2) intrinsic satisfaction ($t(51) = -4.66, p < .000$); and (3) extrinsic satisfaction ($t(51), p < .016$).

Table 16

Pearson Product Moment Correlation Coefficients for Selected Variables

Total Satisfaction = TOTSAT
 Intrinsic Satisfaction = INTSAT
 Extrinsic Satisfaction = EXTSAT
 Total Self Rated Performance = TOTPERF
 Total Semantic Differential Scale Score = TOTDIF
 Experience as Hospital Administrator = EXP

	TOTSAT	INTSAT	EXTSAT	AGE	TENURE	SALARY	TOTPERF	TOTDIF
INTSAT	.8509**							
EXTSAT	.6815**	.2361						
AGE	.1484	.1225	.0526					
TENURE	.2590	.3281**	-.0117	.4021**				
SALARY	.0147	-.0158	.0696	.3303*	.2092			
TOTPERF	.1263	.2345	-.0622	-.0820	.1351	.1262		
TOTDIF	.5728**	.4945**	.4230**	.1249	.1361	-.1597	.2871*	
EXP	.1377	.0604	.1508	.5323**	.5232	.5429**	.0618	.0273

* = Significance $p < .05$

** = Significance $p < .01$

The results are depicted in Table 17. Although all three relationships are significant, again the alpha rate is uncontrolled in these multiple comparisons, so caution in interpreting such results is advised.

Figure 8 depicts the mean scores of the thirty-seven items of the semantic differential scale between the two groups of Low and High Semantic Scale scores.

A post hoc multiple regression model was developed using a stepwise procedure with total job satisfaction scores entered as the dependent variable and total Semantic Differential Scale scores entered as the independent variable. This model accounted for approximately 32% of the variance. The results are shown in Table 18.

A summary of the ten highest means for semantic adjective pairs differentiated by age groups and experience groups is depicted in tables 19 and 20. Two Anova procedures were performed to evaluate the mean scores of each group. The results of the Anova for the age group were: $\{F(2,27)=.003,n.s.\}$. The results of the Anova for the experience group were: $\{F(3,36)=.0000,n.s.\}$. There were no statistically significant differences found among any of the variables.

Summary of Data Analysis

The chapter discussed the results of data analysis from the study's respondents. The response rate was 49.2%. A total of 58 CEO's replied with 54 surveys used in the data analysis. Frequency distributions and descriptive statistics included

Table 17

One Sample t-test Comparing Job Satisfaction Scores and Semantic Differential Scale Scores

Variable	Number of cases	Mean	S.D.	t-value	D.F.	2-tail prob. (separate variance)
----------	-----------------	------	------	---------	------	-------------------------------------

Low Semantic Differential Scale Score (SDS) < 193
 High Semantic Differential Scale Score (SDS) ≥ 193

Total Satisfaction						
Low SDS	28	76.85	7.194	-5.02	51	.000
High SDS	25	84.76	3.370			
Intrinsic Satisfaction						
Low SDS	28	48.5	4.230	-4.66	51	.000
High SDS	25	53.24	2.99			
Extrinsic Satisfaction						
Low SDS	28	20.57	3.71	-2.46	51	.016
High SDS	25	22.80	2.74			

Semantic Differential Scale Summary

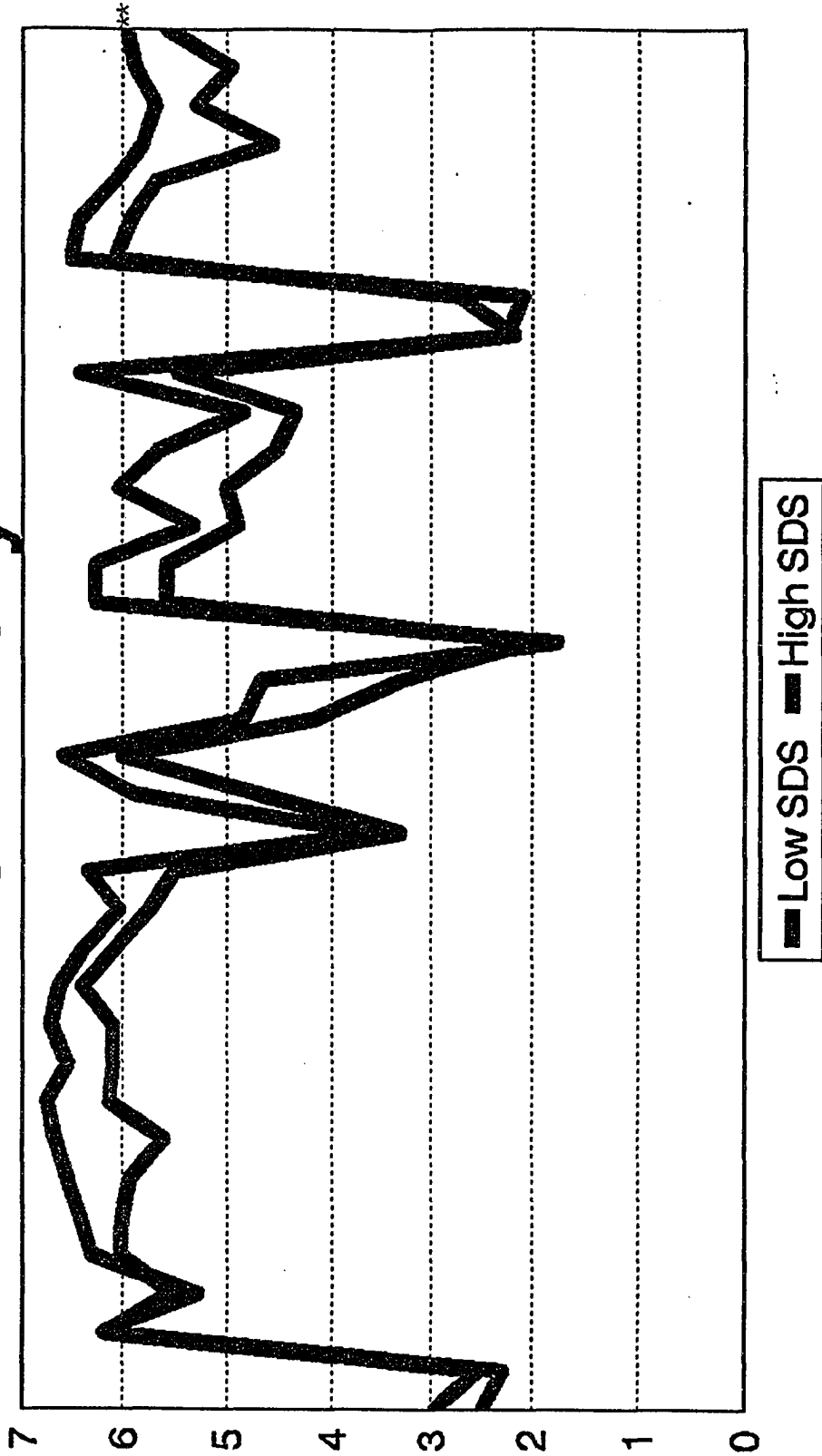


Figure 8

LEGEND: ** = HIGH SDS

Table 18

Multiple Regression Model For Predicting Job Satisfaction

Variable	B	Beta	T	Significance of T
Total Semantic Scale Score	.346	.572	4.99	.0001
Constant	13.77			

Multiple R = .57
R Square = .32
Adjusted R Square = .31
Standard Error = 5.73

Table 19
Ten Highest Mean Semantic Differential Scales
for Adjective Pairs by Age

<40		≥40 <50		≥50	
Active	6.75	Valuable	6.583	Active	6.563
Strong	6.583	Kind	6.458	Strong	6.438
Leader	6.417	Complex	6.375	Valuable	6.438
Obvious	6.417	Good	6.92	Involved	6.375
Personal	6.33	Leader	6.292	Kind	6.375
Complex	6.25	Important	6.25	Successful	6.313
Fast	6.25	Strong	6.25	Good	6.188
Team	6.167	Personal	6.167	Fair	6.188
Valuable	6.167	Involved	6.167	Important	6.188
Optimist	6.167	Obvious	6.167	Team	6.188

Table 20
Ten Highest Mean Semantic Differential Scales
for Adjective Pairs by Experience

<7	≥7 <14	≥14 <21	≥21
Active 6.471	Active 6.50	Leader 6.636	Active 6.636
Successful 6.412	Involved 6.50	Kind 6.636	Valuable 6.636
Strong 6.412	Strong 6.429	Active 6.545	Strong 6.364
Personal 6.353	Valuable 6.357	Fair 6.455	Kind 6.364
Valuable 6.353	Personal 6.357	Complex 6.455	Complex 6.364
Involved 6.353	Successful 6.286	Involved 6.364	Successful 6.364
Leader 6.353	Team 6.286	Strong 6.364	Important 6.364
Fair 6.118	Complex 6.214	Optimist 6.273	Regulated 6.273
Happy 6.118	Leader 6.214	Realistic 6.273	Team 6.182
Good 6.176	Good & Important 6.143	Team 6.182	Personal 6.182

demographic data. Mean age of the respondents was 47 and 95% were male. The mean number of inpatient beds was 215.5. CEO's mean Self Rated Performance score was 40.63. CEO's ranked their performance highest on employee and staff relations and managerial team building and lowest on information systems. The mean score for the Semantic Differential Scale score was 80.26.

Cronbach's reliability coefficients for the scales were: (1) Self Rated Performance (.61); (2) Semantic Differential Scale (.68); (3) Total Job Satisfaction (.79); (4) Intrinsic Job Satisfaction (.74); and (5) Extrinsic Job satisfaction (.59).

Multiple regression explored research question one. The person-Environment Fit trait as measured by the Semantic Differential Scales was the only independent variable that entered significantly ($p < .05$) into the model. The amount of variance accounted for measured .35.

A factor analysis addressed research question two. Ten factors accounted for 71.4% of the total variance on the Semantic Differential Scale.

Research question three examined the relationship between lower paid and higher paid CEO's and their job satisfaction. A one-sample t-test revealed no statistically significant relationship between the variables.

Research question four was analyzed using a paired t-test to examine the relationship between intrinsic and extrinsic job satisfaction. There was no statistically significant difference between the variables.

Research question five used several ANOVA procedures to examine the various relationships between the age categories and experience categories compared to intrinsic, extrinsic job satisfaction, total Self Rated Performance, and Total Semantic Differential Scale scores. There were no statistically significant relationships discovered.

Research question six analyzed the relationship between tenure and job satisfaction. Student's t-tests were performed comparing tenure and total job satisfaction, intrinsic satisfaction, and extrinsic satisfaction. There were no statistically significant differences found between tenure and total job satisfaction and tenure and extrinsic satisfaction. There was a statistically significant difference identified between tenure and intrinsic satisfaction.

Post hoc analyses of job satisfaction scores were compared between the dichotomized groups of high and low Semantic Differential Scale scores. Student's t-tests found statistically significant differences between the high and low score Semantic Differential Scale groups and their respective satisfactions along the three dimensions of satisfaction: (1) total $\{t(51)=-5.02, p<.000\}$; (2) intrinsic $\{t(51)=-4.66, p<.000\}$; and (3) extrinsic $\{t(51)=-2.46, p<.016\}$. The high score Semantic Differential Scale group had higher satisfaction scores along all three dimensions.

Post hoc analysis were also conducted to further explore the Semantic Differential scale as a predictor of job satisfaction in

a regression model. A stepwise procedure resulted in an R square equal to .32

A qualitative summary of the ten highest mean scales for semantic adjective pairs by age and experience categories was presented.

Chapter 5

Summary and Conclusions

This chapter presented a summary of the study's findings and their significance to the theoretical framework presented. Conclusions, suggestions for future research and practical application are presented.

Summary of the Study

The purpose of the study was to identify which of the personal, environmental, and person-environment fit traits would best predict job satisfaction of Virginia Hospital Chief Executive Officers (CEO's). A second purpose was to identify which semantic descriptors best described the position of hospital CEO.

The study investigated the relationship of Self Rated Performance (SRP), hospital size (as measured by number of inpatient beds), tenure, and semantic differential scores in predicting job satisfaction. These variables were selected because of their theoretical relationship to job satisfaction and were identified respectively with person, environmental, and person-environment fit traits. Additional research questions were developed to assess several theories related to job satisfaction.

Summary of the Findings

Six research questions were explored. The first question explored which person, environmental and person-environment fit

traits will predict job satisfaction. A multiple regression model found moderate support for a finding that the person-environment fit trait as measured by the Semantic Differential Scale contributed significantly to the basic model with an adjusted R square of .30. None of the person or environmental traits contributed significantly to the model.

The second research question asked what are the most significant job descriptors for hospital CEO's. A factor analysis resulted in 10 factors that explained 71.4% of the total variance. The word pairs with the highest communality scores were: (1) subtle/obvious; (2) passive/active; and (3) fuzzy/clear. A second exploratory purpose of the Semantic Differential Scale was to measure person-environment fit. Among the eleven factors the first three were labelled as describing affective traits, cognitive traits, and person-environment fit traits.

The third research question examined the relationship between salary and job satisfaction. There were no statistically significant findings which is consistent with Herzberg's Motivation-Hygiene Theory which states in part that salary does not contribute to job satisfaction, but can only function as a dissatisfier.

The fourth research question examined the difference between intrinsic and extrinsic satisfaction. There was no statistically significant difference between scores along these two dimensions. This does not offer support for Porter and Lawler's Expectancy

Theory which holds in part that the ability to reward oneself is easier to achieve and subject to less interference than extrinsic rewards.

The fifth research question examined the several relationships between intrinsic and extrinsic satisfaction, total Self Rated Performance scores, Semantic Differential Scale scores based upon age and experience. There were no statistically significant relationships found. One possible interpretation of this finding is that all of the CEO's were all rather well-satisfied and rated their performance rather well, leaving very little differences to be discovered along the other dimensions. An additional issue is the low reliability of the Self Rated performance instrument which was equal to (.61), below the acceptable level of (.70) as stated by Nunally (1967). A more reliable instrument could be developed by lengthening the number of items. An additional concern with the existing instrument is the use of somewhat pejorative terms on the low end of the scale, i.e., poor and very poor. A more discriminating instrument might use a ten point Likert scale anchored by neutral terms such as satisfactory and unsatisfactory.

The sixth research question examined the relationship between tenure and job satisfaction. The findings were somewhat equivocal. Tenure was dichotomized into two categories: (1) less than 3 years as CEO; and (2) equal to or greater than 3 years as CEO. There was no statistically significant difference between the high and low tenured CEO's and their respective total job

satisfaction scores. However, a post hoc analysis of these same two groups comparing their intrinsic and extrinsic satisfaction did reveal a statistically significant difference along the intrinsic dimension. The higher tenure CEO's scored a statistically significant higher intrinsic job satisfaction score than did the lower tenure CEO's. One possible explanation for this finding is that the higher tenure CEO's are more secure in their own positions at least in their own mind and therefore are more likely to reward themselves. This finding offers weak support of Dawis and Lofquist's Theory of Work Adjustment which states in part that tenure is a measure of correspondence (Person-Environment Fit).

Conclusions

An unanswered question remains as to the job satisfaction of the sample population's non-respondents. It is certainly possible that only satisfied or high performing hospital CEO's responded to the survey. However many of the study's findings are consistent with previous research. For example, several studies have found a positive relationship between hierarchical level and job satisfaction (Bergmann, 1981; Porter & Lawler 1965). One would expect to find a relatively high level of satisfaction in a population of CEO's.

A second issue is that one may contend that the semantic differential does not measure person-environment fit. Though the instrument is developmental, the factor analysis and in particular the resultant factors lend some support that person-

environment fit is measured by the instrument. Furthermore, the explained variance of 71.4% is rather high. The instrument also correlated moderately with all three measures of satisfaction as well as the Self Rated Performance measure. If one accepts that performance is correlated with job satisfaction, and one also accepts that P-E fit is correlated with job satisfaction then a strong argument can be made for the connection of P-E fit and performance. An instrument such as this may assist in identifying potential P-E fit and performance of a prospective hospital CEO. Further research is needed in this particular area.

A third issue is the personal characteristics and semantic descriptors of Virginia Hospital Chief Executive Officer's. The factor analysis offers some clue, especially the first factor labelled the affective factor. It is interesting to note that unlike the Minnesota Satisfaction Questionnaire which primarily measures cognitive qualities, the Semantic Differential Scale appears to have tapped into what the affective qualities of hospital CEO's are. This information is potentially useful to hospital boards of directors, especially in the context of hiring a CEO with whom they can effectively communicate.

One result of this study is the potential application of these results in developing future leaders of hospitals. For example, a curriculum based upon the areas that these Virginia hospital CEO's felt their performance was strongest and weakest could be developed. Likewise the semantic descriptors and

factors identified would also be very useful in developing and cultivating future hospital CEO's. It is quite striking the rather consistent emphasis by this study's respondents, regardless of age or experience, on a few key qualities such as leader, active, strong, and involved. Knowing these are some of the qualities of hospital CEO's who are high performers, if at least by their own measure, it would be very worthwhile to use that information and integrate it into a curriculum.

The study's findings in the areas of performance, salary and satisfaction also point to some interesting conclusions based on the evidence. In today's time of increased scrutiny of hospital CEO salaries it is worth noting that there were no significant relationships discovered between salary, performance and satisfaction. The implication to hospital boards of directors and compensation committees should be clear. Salary alone will not ensure job satisfaction and in turn reduce turnover nor necessarily affect performance. Herzberg's point that salary will serve only as a maintenance factor and do nothing to contribute towards satisfaction is well taken.

One could interpret this study's findings as an indication that hospital boards of directors should first find the right person and then, and only then, seek to fairly compensate and satisfy that person. It would seem that problems such as turnover may well be the result of an incorrect temporal order of decision making rather than what might be described as simply incorrect decisions.

Closely related to the notion of finding the right person is the concept of defining the environment in which a hospital CEO functions. Unlike virtually any other hospital employee the hospital CEO conceivably operates in two environments. While all hospital employees including the CEO operate in the internal environment or the hospital itself, the CEO is unique in that a second environment exists, the external environment. The external environment includes forces such as the hospital board of directors, the community and competing hospitals. By recognizing this second external environment, carefully defining it and recognizing the absolute requirement for a hospital CEO to fit into that environment the chances for a good fit of CEO and environments (plural) is greatly enhanced.

Lastly, the value of a careful examination of the role of perceptions in the job satisfaction and job performance equation cannot be underestimated. Hospital boards of directors may do well to consider changing a CEO's perception of his or her own performance whenever there is a signal that the CEO is dissatisfied. Recall the Lawler and Porter (1967) model (see figure 1) that depicts a more wavy line between performance and extrinsic rewards. The wavy line they explain depicts the imperfect connection between associating extrinsic rewards with performance. The relationship is further moderated by the effect of perceptions of the reward which in turn influences job satisfaction. It is because of the imperfect connection and the moderating effect of perception that extrinsic rewards do not

necessarily affect job satisfaction - not that extrinsic rewards cannot in and of themselves affect job satisfaction. It may in fact be much easier, cheaper and more effective to change the perception rather than the extrinsic reward.

The following conclusions are made relative to the variables of interest in this study:

1. Person-Environment Fit traits as measured by the Semantic Differential scale are the strongest predictors of job satisfaction.
2. There is no relationship between salary and job satisfaction.
3. Self Rated Performance does not significantly predict job satisfaction.
4. Tenure is moderately correlated with intrinsic satisfaction.
5. There is not a statistically significant difference in intrinsic and extrinsic satisfaction scores.

Recommendations For Research

Further exploration of performance as a determinant of job satisfaction is warranted. An additional question that may be asked of hospital CEO's is to rank the relative importance of the various performance area's. For example, in this study CEO's ranked their performance lowest in the area of information systems management. It would be useful to know the relative importance of that particular skill. Other measures of performance as suggested by Organ (1988) could be of interest to future researchers. Organ suggested that job performance should include measures that he described as Organizational Citizenship

Behaviors. The behaviors are not necessarily those required by a conventional job description, rather they invoke qualities that are so to speak indicative of one's "loyalty" to the organization.

The semantic differential scale appears to have some potential to tap into the phenomenon of P - E fit as determinant of job satisfaction. A study using several similarly constructed semantic scales that measures the person, the environment, and person-environment fit both subjectively and objectively may yield useful data.

Finally, a qualitative study of this particular group may be especially insightful. Though the CEO's may seem well satisfied and rank their performance rather high, it would be helpful to get at why they think they are satisfied, and why they think their performance is so well. For example, the MSQ ranks how well one is satisfied in terms of one's feeling of accomplishment. This item is considered to rate one's intrinsic satisfaction. It would be useful to have the CEO describe in his own terms what gives him the "feeling accomplishment".

Recommendations For Practical Application

For the manager interested in increasing an employee's performance through increasing job satisfaction the area of intrinsic satisfaction appears to hold the most promise. Managers should focus on elements of the work environment that they can change or adapt to facilitate intrinsic rewards. This of course is easier said than done. An example of this might be

allowing an employee to take one afternoon a month off at his or her own discretion, no questions asked. One may argue that only a person can reward himself intrinsically regardless of management interventions. A second area to explore is the role of perceptions and the effect perceptions have on performance and job satisfaction. The hope is that creative managers can develop methods to educate and enlighten their employees such that the employee himself will know when he or she is doing a good job or when they are truly being rewarded for performance.

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Footnotes

1. Information provided by Michael Lundberg of the Virginia Hospital Association telephone interview 3 March 1994.

Part I (Please tell us about yourself and your hospital)

1. Your age _____
2. Gender _____ Female _____ Male
3. Race _____ African-American _____ Asian/Pacific Islander _____ Caucasian
 _____ Hispanic _____ Native American _____ Other
4. Number of years of education post high school _____
5. Number of years in current position _____
6. Number of years as a hospital administrator _____
7. Number of years with current organization _____
8. Number of Hospital CEO positions held including current position _____
9. Most recent salary per year (Check one)

_____ <\$50,000	_____ \$50,001 - \$75,000
_____ \$75,001 - \$100,000	_____ \$100,001 - \$125,000
_____ \$125,001 - \$150,000	_____ \$150,001 - \$175,000
_____ \$175,001 - \$200,000	_____ \$200,001 - \$225,000
_____ \$225,001 - \$250,000	_____ >\$250,001
10. Is your hospital - (check one on each line)

(a) Government _____	Non-Government _____
(b) For profit _____	Not-for-profit _____
(c) Urban _____	Rural _____
11. Number of Full Time Equivalents (FTE's) employed at your hospital _____
12. Number of inpatient beds _____
13. Average daily census _____
14. Number of administrative assistants and associate administrators _____
15. Average Staff turnover per year last three years _____%
16. Hospital Budget per year \$ _____
17. Estimated Market Share _____%

Please continue on the next page -----> **APPENDIX A**

Part II (Please tell us about how you rate your performance in the following areas)

Mark an X in the column that most closely describes how you rate your performance in each of the following areas using the following scale:

	Very poor	poor	average	good	Very good
1. Information system management	_____	_____	_____	_____	_____
2. Marketing	_____	_____	_____	_____	_____
3. Physician Recruitment	_____	_____	_____	_____	_____
4. Managerial team-building	_____	_____	_____	_____	_____
5. Medical provider relations	_____	_____	_____	_____	_____
6. Employee & Staff relations	_____	_____	_____	_____	_____
7. Finance	_____	_____	_____	_____	_____
8. Budgeting	_____	_____	_____	_____	_____
9. Public Relations	_____	_____	_____	_____	_____
10. Quality Review	_____	_____	_____	_____	_____
Overall Performance	_____	_____	_____	_____	_____
	Very poor	poor	average	good	Very good

Please continue on the next page.....>

Part III

Semantic Differential Scale

The next section is your definition of a hospital Chief Executive Officer (CEO). The list of word pairs is arranged on a seven-point scale such that you would mark along the scale nearest to the word you feel that most closely describes your job as a hospital CEO.

For example if the concept being measured was a "house" and the scale was as follows:

straight X :___:___:___:___:___:___ crooked
warm ___:___:___:___:___:___:___ cold
new ___:___:___:___:___:___:___ X old

you might mark an "X" closest to the word "straight" if you felt the word straight was closely associated with the concept house. Likewise you might mark an "X" closer to the word "warm" if you felt that the word warm was more closely associated with the concept house. Finally if you felt that "old" was closely associated with the concept house you might mark an "X" closest to the word old.

If you felt the scale was either irrelevant or that both words were equally associated with the concept "house" you would mark an "X" in the middle of the scale as illustrated below:

blue ___:___:___:___:___:___:___ X :___:___:___ green

Remember that the concept being measured is how you describe your job. Do not look at previous responses as you proceed through the survey. Answer each word pair individually as you complete the survey.

Please continue on the next page.....>

PLACE AN "X" IN THE APPROPRIATE SPACE
Hospital Chief Executive Officer

Public	_____	:_____	:_____	:_____	:_____	:_____	:_____	Private
Administrative	_____	:_____	:_____	:_____	:_____	:_____	:_____	Clinical
Simple	_____	:_____	:_____	:_____	:_____	:_____	:_____	Complex
De-regulated	_____	:_____	:_____	:_____	:_____	:_____	:_____	Regulated
Individual	_____	:_____	:_____	:_____	:_____	:_____	:_____	Team
Impersonal	_____	:_____	:_____	:_____	:_____	:_____	:_____	Personal
Good	_____	:_____	:_____	:_____	:_____	:_____	:_____	Bad
Unfair	_____	:_____	:_____	:_____	:_____	:_____	:_____	Fair
Valuable	_____	:_____	:_____	:_____	:_____	:_____	:_____	Worthless
Detached	_____	:_____	:_____	:_____	:_____	:_____	:_____	Involved
Strong	_____	:_____	:_____	:_____	:_____	:_____	:_____	Weak
Active	_____	:_____	:_____	:_____	:_____	:_____	:_____	Passive
Kind	_____	:_____	:_____	:_____	:_____	:_____	:_____	Cruel
Slow	_____	:_____	:_____	:_____	:_____	:_____	:_____	Fast
Pessimistic	_____	:_____	:_____	:_____	:_____	:_____	:_____	Optimistic
De-central	_____	:_____	:_____	:_____	:_____	:_____	:_____	Central
Clear	_____	:_____	:_____	:_____	:_____	:_____	:_____	Fuzzy
Unsuccessful	_____	:_____	:_____	:_____	:_____	:_____	:_____	Successful
Subtle	_____	:_____	:_____	:_____	:_____	:_____	:_____	Obvious
Tense	_____	:_____	:_____	:_____	:_____	:_____	:_____	Relaxed
Present	_____	:_____	:_____	:_____	:_____	:_____	:_____	Past
Happy	_____	:_____	:_____	:_____	:_____	:_____	:_____	Sad
Unrealistic	_____	:_____	:_____	:_____	:_____	:_____	:_____	Realistic
Process	_____	:_____	:_____	:_____	:_____	:_____	:_____	Outcome
Frustrating	_____	:_____	:_____	:_____	:_____	:_____	:_____	Rewarding
Order	_____	:_____	:_____	:_____	:_____	:_____	:_____	Chaos
Young	_____	:_____	:_____	:_____	:_____	:_____	:_____	Old
Pleasant	_____	:_____	:_____	:_____	:_____	:_____	:_____	Unpleasant
Future	_____	:_____	:_____	:_____	:_____	:_____	:_____	Present
Aggressive	_____	:_____	:_____	:_____	:_____	:_____	:_____	Defensive
Manager	_____	:_____	:_____	:_____	:_____	:_____	:_____	Leader
Important	_____	:_____	:_____	:_____	:_____	:_____	:_____	Unimportant
Consensus	_____	:_____	:_____	:_____	:_____	:_____	:_____	Dissent
Legal	_____	:_____	:_____	:_____	:_____	:_____	:_____	Ethical
Short-term	_____	:_____	:_____	:_____	:_____	:_____	:_____	Long-term
Control	_____	:_____	:_____	:_____	:_____	:_____	:_____	Guide
Decisive	_____	:_____	:_____	:_____	:_____	:_____	:_____	Ponderous

Part IV (Minnesota Satisfaction Questionnaire Copyright 1977)

Ask Yourself: How satisfied am I with this aspect of my job?

Very Sat. means I am very satisfied with this aspect of my job.

Sat. Means I am satisfied with this aspect of my job.

N means I can't decide whether I am satisfied or not with this aspect of my job.

Dissat. means I am dissatisfied with this aspect of my job.

Very Dissat. Means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about..

	Very				Very
	Dissat.	Dissat.	N	Sat.	Sat.
1. Being able to keep busy all the time.....	_____	_____	_____	_____	_____
2. The chance to work alone on the job.....	_____	_____	_____	_____	_____
3. The chance to do different things from time to time.....	_____	_____	_____	_____	_____
4. The chance to be "somebody" in the community.....	_____	_____	_____	_____	_____
5. The way my boss handles his/her workers.....	_____	_____	_____	_____	_____
6. The competence of my supervisor in making decisions.....	_____	_____	_____	_____	_____
7. Being able to do things that don't go against my conscience...	_____	_____	_____	_____	_____
8. The way my job provides for steady employment.....	_____	_____	_____	_____	_____
9. The chance to do things for other people.....	_____	_____	_____	_____	_____
10. The chance to tell people what to do.....	_____	_____	_____	_____	_____
11. The chance to do something that makes use of my abilities.....	_____	_____	_____	_____	_____
12. The way my company policies are put into practice.....	_____	_____	_____	_____	_____
13. My pay and the amount of work I do.....	_____	_____	_____	_____	_____
14. The chances for advancement on this job.....	_____	_____	_____	_____	_____
15. The freedom to use my own judgement.....	_____	_____	_____	_____	_____
16. The chance to try my own methods of doing the job.....	_____	_____	_____	_____	_____
17. The working conditions.....	_____	_____	_____	_____	_____
18. The way my co-workers get along with each other.....	_____	_____	_____	_____	_____
19. The praise I get for doing a good job.....	_____	_____	_____	_____	_____
20. The feeling of accomplishment get from the job.....	_____	_____	_____	_____	_____
	Very				Very
	Dissat.	Dissat.	N	Sat.	Sat.

This concludes the survey. Thank you for your participation. Please return in the enclosed envelope.

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May 19, 1994

Justin C. Matus
3204 Mapelton Crescent
Chesapeake, VA 23321

Dear Justin C. Matus:

We are pleased to grant you permission to photocopy 100 copies of the Minnesota Satisfaction Questionnaire short form for your research. We also grant you permission to include it as an appendix in your doctoral dissertation.

Please note that each photocopy that you make must include the following copyright statement:

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Vocational Psychology Research is currently in the process of revising the MSQ manual and it is very important that we receive copies of your research study results in order to construct new norm tables. Therefore, we would appreciate receiving a copy of your results including 1) Demographic data of respondents, including age, education level, occupation and job tenure; and 2) response statistics including, scale means, standard deviations, reliability coefficients, and standard errors of measurement.

Your providing this information will be an important and valuable contribution to the new MSQ manual. If you have any questions concerning this request, please feel free to call us at 612-625-1367.

Sincerely,



Dr. David J. Weiss, Director
Vocational Psychology Research

APPENDIX B

27 May 1994

Dear 2title~ lname~,

I am conducting a study of Virginia Hospital Chief Executive Officers for my dissertation component for my Ph.D. in Health Services from Old Dominion University. Your participation in this survey is greatly appreciated and all information will be kept strictly confidential. There is no identifying information requested on the survey instrument itself so please do not identify yourself or your facility. All results will be reported in aggregate form only.

The survey itself will take approximately 10 minutes to complete and presents questions in the four areas: (a) yourself and your hospital; (b) how you rate your job performance; (c) how you describe your job; and (d) discusses your job satisfaction.

The survey is self-explanatory and designed to conveniently fold and mail in the stamped return envelope provided. Also included is a separate reply postcard for you to return separately once you've completed the survey. This assures your anonymity and assists me in tracking who did or did not respond for follow up purposes. If you are interested in receiving results of this study you may check the appropriate block on this postcard, and I will be happy to share the results with you. If you have any questions concerning my dissertation project, please contact me at (804) 396-3200 or my advisor, Dr. Gregory Frazer, at (804) 683-4519. The deadline for returning the survey is 15 June 1994. Again thank you so much for agreeing to participate in this study.

Sincerely,

Justin C. Matus

APPENDIX C

Justin C. Matus
Virginia Hospital CEO
Research Project
Chesapeake, Virginia 23321

11 June 1994

Dear 2title~ lname-,

If you have recently completed the Virginia Hospital CEO Survey, then accept my sincerest appreciation for taking time out from your busy schedule and read no further. However, if you have not yet had a chance to complete the survey, perhaps you could take a moment to complete the enclosed survey. The survey can easily be completed in less than 10 minutes. This is a study of Virginia Hospital CEO's exclusively, and as you may well imagine it is a very small and select group and each response is extremely important. Therefore, your thoughts on your personal experience as a hospital CEO are very important to this research. Your reply is strictly confidential and all information is reported in aggregate form only. The information collected will be used in conjunction with the dissertation component for my Ph.D. in Health Services from Old Dominion University.

I have extended the deadline for the study until this Friday June 17, 1994. If you could complete the survey and mail by the deadline I would be very appreciative. If it is more convenient you may fax your response to me at (804) 396-3209. If you have any questions please feel free to call me at (804) 396-3200.

Again thank you so much for agreeing to participate in this study.

Sincerely,

Justin C. Matus

APPENDIX D