Establishing a Profile of First-Line Managers: Job Reactions, Values and Needs for Head Nurses

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ESTABLISHING A PROFILE OF FIRST-LINE MANAGERS: JOB REACTIONS, VALUES AND NEEDS FOR HEAD NURSES

By

Missy Fleming

A Dissertation Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

October

1984
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A final thank you is warmly extended to my young son, Brian, my husband, Jack Block, and our babysitter, Hattie Kittrell, for their loving support.
The author, Missy Fleming, is the daughter of Paul and Mary Helena Fleming. She was born on 15 May, 1948 in Alton, Illinois. She attended Jersey Community High School in Jerseyville, Illinois and graduated from there in May, 1966. She completed her undergraduate studies at Webster College in St. Louis, Missouri in 1970. She completed her master's degree in 1973 at Loyola University of Chicago where she was a graduate assistant in 1972.

In 1978 she was accepted by the Graduate School at Loyola University of Chicago to pursue doctoral studies. In 1981 the author was elected to membership in Alpha Sigma Nu the National Jesuit Honor Society. While completing her coursework the author worked as the Counselor and Student Services Director at Wesley-Passavant School of Nursing and later as the Director of Organization Development of Nursing for Northwestern Memorial Hospital. After completing her coursework the author directed the Career Counseling Service at Northwestern University's Program on Women where she is currently employed. The author has published in the APGA Abstracts, the Chicago Sun-Times and Nursing Administration Quarterly.
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CHAPTER I

INTRODUCTION

Job Reactions

Over the past thirty years, the topic of worker's responses to their jobs has generated an extraordinary number of research studies (Brousseau, 1978; Cawsey et al., 1982; Curran and Stamouth, 1981; Ferratt, 1981; Ghiselli and Johnson, 1970; Hackman and Lawler, 1971; Herzberg, 1966; Hoppock, 1935; Imparato, 1973; Korman, 1971; Larson et al., 1984; Lawler and Porter, 1967; Mowday, 1982; Nash, 1983; Porter, 1961; Schaeffer, 1953; Schmitt et al., 1978; Turner, 1964; Wanous and Lawler, 1972). The results of these studies are of interest to both the workers themselves and the organizations employing them. Organizational interest in these studies continues to focus on how worker responses translate into productivity. As the subject of these investigations, workers evidence concern for meeting their needs for fulfillment and receiving adequate compensation for their efforts. However, many existing investigations do not address the changing work arena and its impact upon worker job reactions.

The work scene is in the midst of transition and a significant component underscoring this change is a shift
in worker values (Locke, 1976). Increases in technological advances and a general decline in job stability for many occupations challenge traditional work values. Workers want to know the employers to whom they are loyal. They want some evidence of their personal worth from the employing organizations which they trust and respect. Workers who value a reciprocal relationship with their employers experience increasing difficulty identifying with large corporations whose bureaucratic procedures seem highly impersonal (Brown, 1976).

As a result of these developments, the general workforce is beginning to overtly articulate and act upon what it has always covertly valued (Cooper et al., 1979). Work strikes are an aggressive measure for maintaining values and desired options ("The Nurses' Discontent," 1981). A more subtle expression of discontent is through the impact of needs and values upon performance motivation (Vroom, 1964). Organizations are acutely aware of the inextricable link between motivation and productivity.

A prevailing response to this situation on the part of organizations is through quality of work life activities. Quality of work life, QWL, activities reflect the degree to which workers are able to satisfy important personal needs through their experiences at work. Ideally, QWL provides an approach for creating an
industrial democracy through which workers participate in corporate decision making (Suttle, 1977).

However, QWL remains a generalized plan for increasing worker performance motivation. In spite of this organizational intervention, many important worker needs still remain unmet while many changing values are still not recognized. This situation clearly calls for an improved approach to understanding worker discontent. This can be accomplished by a detailed analysis of the important needs, values, and related aspects of job satisfaction as factors that significantly affect worker performance motivation.

**Need for the Study**

Organizations know they exert a significant amount of influence upon the motivation that workers experience for their jobs (Lawler, 1973). However, existing organizational approaches to motivational problems reveal a lack of sensitivity to worker individuality. Many solutions to this problem are based on the belief that workers are interchangeable parts of an organization. A more contemporary strategy for enhancing motivation proposes that organizations match workers with jobs (Hackman and Oldham, 1980). This investigation integrates Hackman and Oldham's beliefs about the needs of today's
worker in addition to other facets of work life that make an impact upon productivity.

Comprehensive review of a selected worker sample can increase appreciation for the characteristics that influence worker performance motivation. This type of review can be efficiently undertaken by utilization of a profile. The profile includes selected salient components that individually describe each worker. Profiles can be compared on many different levels with respect to speculations and possible conclusions about performance motivation.

First-line managers who are Head Nurses comprise an employee group deserving further consideration. The Head Nurse's profiles include job reactions, job satisfaction, values, and needs that are correlated with their rated job performance in answer to the following seven research questions:

1. What are the Motivating Potential Scores as measured by the Job Diagnostic Survey for the first-line managers, Head Nurses, in different job performance categories?

2. What are the general job satisfaction scores as measured by the Minnesota Satisfaction Questionnaire for first-line managers, Head Nurses, in different job performance categories?
3. What is the correlation between high Motivating Potential Scores as measured by the Job Diagnostic Survey and high general job satisfaction scores as measured by the Minnesota Satisfaction Questionnaire for first-line managers, Head Nurses?

4. What are the operative values as measured by the Personal Values Questionnaire for first-line managers, Head Nurses, in different job performance categories?

5. What are the operative values for first-line managers, Head Nurses, with a pragmatic primary mode of valuation and first-line managers, Head Nurses, with an affective primary mode of valuation as measured by the Personal Values Questionnaire with respect to rated job performance?

6. What are the need levels for achievement, aggression, autonomy, change, deference, dominance, and intraception as measured by the Edwards Personal Preference Survey for first-line managers, Head Nurses, in different job performance categories?

7. What is the relationship between the needs for and values of achievement, aggression, autonomy, change, obedience/deference, influence/dominance, and compassion/intraception for first-line managers, Head Nurses, in different job performance categories?
Key aspects of this investigation highlight its uniqueness. This study takes into account the interrelationships among a greater number of significant variables than previous efforts reported in the literature (Ansari et al., 1982; Brousseau, 1978; Campbell, 1976; Cawsey et al., 1982; England, 1975; Ginzberg et al., 1982; Hackman et al., 1975; Langer, 1982; Lawler, 1982; Manoff, 1974; Newman, 1975; Porter et al., 1976; Rokeach, 1973; Salancik and Pfeffer, 1977; Terborg and Davis, 1982; Wandelt, 1981). These variables include work values, personal needs, responses to the design of the job, and job satisfaction. Instruments utilized to measure these variables are the Personal Values Questionnaire, Edwards Personal Preference Schedule, Job Diagnostic Survey, and Minnesota Satisfaction Questionnaire, respectively. A demographic questionnaire further categorizes these variables. This information is correlated with job performance specially rated for the purposes of this investigation. The summation of all these variables combine to form a profile of each subject.

Subjects

The subjects in this investigation are Head Nurses who are first-line nursing managers working in a hospital. In general, managers are an important group of workers worthy of investigational attention. Only the past twenty
years offer large-scale studies of managers. However, the pervasiveness and complexity of these important positions demand further study (Porter and Lawler, 1969). This study features managers because of the impact their motivational level has upon others in relation to operationalizing organizational goals. First-line nursing managers, Head Nurses, are selected to represent the broad perspective of first-line managers working in a hospital.

Limitations

This investigation is bounded by several limitations. The investigation cannot control all organizational variables influencing the subject's responses to the design of their jobs and their job satisfaction. Its findings are limited to Head Nurses at Northwestern Memorial Hospital as representative of first-line nursing managers who work in a hospital setting, in particular. It is further limited by the size of the sample. This investigation is limited by the four major variables selected for inclusion in the profile and the instrument's assessments of these variables.

Definition of Terms

This investigation requires definition of and explanation for the following seven salient terms: Head Nurse, reaction to job design, job satisfaction, values, needs, rated job performance, managerial profile. The
first term is Head Nurse, a first-line patient care manager (Clark and Shea, 1979) and the Northwestern Memorial Hospital job title for all the nurses participating as subjects in this investigation. The second term is reaction to job design which reflects the Head Nurse's responses to their work's motivational factors as expressed in the Motivating Potential Score of the Job Diagnostic Survey (Hackman and Oldham, 1980). The third term is job satisfaction which reflects the Head Nurse's emotional responses to their work as measured by the Minnesota Satisfaction Questionnaire's general satisfaction score (Ferratt, 1981; Weiss et al., 1967). The fourth term is values which reflects the Head Nurse's stable beliefs directing their behavior identified by the Personal Values Questionnaire (England, 1975; Rokeach, 1973). The fifth term is needs that reflects the Head Nurse's levels of their manifest needs measured by the Edwards Personal Preference Schedule (Edwards, 1975; Murray, 1938). The sixth term is rated job performance which reflects recent Head Nurse job performance identified by their regular evaluators on the Supervisor Rating Form, a modified version of their standard appraisal form. The seventh term is managerial profile which describes the job reactions, job satisfaction,
values and needs of each Head Nurse with respect to rated job performance.

Organization of the Study

Chapter I discusses the importance of identifying first-line manager's motivation for their jobs as it correlates with their job performance. How these two major variables are related is the research question this investigation is attempting to answer. Chapter II reviews the salient aspects of the literature in relation to the manager's values, needs, reactions to the design of their jobs, and job satisfaction. Chapter III outlines the methodology for data collection, instrumentation utilized, the investigation's design, and its sample. Chapter IV presents the analysis of the data collected. Chapter V summarizes the investigation.
CHAPTER II

REVIEW OF THE LITERATURE

Chapter Outline

This chapter reviews the existing literature relevant to employee interactions with their jobs in addition to underscoring the necessity for investigating the topic further. To accomplish this task, Chapter II outlines a theoretical framework which explains the rationale for utilizing a profile approach to enhance understanding of a particular population sample. Aspects of this profile, as derived from and supported by a literature review, are explained in depth. From the numerous questions proposed by the literature, seven questions are considered to direct further study.

THEORETICAL FRAMEWORK

Worker Motivation

The identification and measurement of worker responses to their jobs dominates research efforts in organizational behavior (Salancik and Pfeffer, 1977). This extensive research tradition holds tenaciously to the belief that job reactions have the potential to explain worker motivation (Jenkins et al., 1975). Because of its
link with productivity, worker motivation is a prevalent subject in organizational research.

Lewin's (1938) pioneering work gives some context to the numerous speculations about the etiology of worker motivation. For Lewin, two major factors combine to determine worker motivation. These factors are the employees themselves and the organization. Thus, employee's organizational behaviors are a function of their personal characteristics as they relate to the characteristics of the organization (Newman, 1975).

McClelland is a psychologist who has spent years studying the motivation of managers (Williams, 1978). Through his research he offers another proposal to explain the interaction between worker motivation and performance. He believes achievement motivation is an important motivator of good performance in work organizations. Achievement motivation is a desire to be successful in competitive situations or a desire to perform in terms of a standard of excellence (McClelland, 1953). According to McClelland, workers whose achievement motivation is high should be excellent performers in certain work situations. His achievement assessment methods remain somewhat cumbersome and difficult to apply for organizations interested in understanding and identifying worker's
motivation to perform well in their jobs (Hackman and Oldham, 1980).

Expectancy theory models offer a very promising framework to compensate for the lack of a motivation model which effectively combines existing knowledge into a comprehensive motivation theory (Nadler and Lawler, 1977). The work of Vroom (1964) and Porter and Lawler (1968) are typically associated with expectancy theory. However, the theory was originally developed in the 1930's by E.C. Tolman and Kurt Lewin (Williams, 1978). A brief explanation of the theory reveals its potential for explaining this complex situation of worker motivation.

Underlying Vroom's (1964) hybrid model is the belief that worker motivation is the major determinant of organizational outcomes. Vroom bases his approach on the three important concepts called expectancy, valence, and instrumentality. Expectancy refers to the perceived probability that a given level of effort will result in a specified outcome. For instance, a worker may wonder about the likelihood of high performance, which reflects effort, resulting in a promotion, which is an outcome. Before deciding the relationship between performance and a promotion, workers must identify the value an outcome holds for them. This value is what Vroom terms valence.
valence reflects the strength of a worker's desire for or attraction to the outcomes of different courses of action.

Vroom makes a further distinction between first-level and second-level outcomes. First-level outcomes concern external rewards like money, a promotion, or some form of recognition. Second-level outcomes concern the satisfaction of inner needs, or lack of them, toward which the first-level outcomes are purportedly directed (Vroom, 1964). An example can illustrate this distinction between first-level and second-level outcomes.

An employee with a strong expectancy believes that a certain high level of performance will result in a promotion which is a first-level outcome. The promotion can be viewed as a complement to existing self esteem and enhancement to the worker's sense of achievement. However, the promotion can also be viewed as primarily leading to the loss of friends and involving a high level of personal frustration. Thus, the promotion is not a strong motivator. This is especially true if the valence of achievement is low and the valence of friendship is high. The distinction between internal and external goals and rewards helps to objectify many of the motivational conflicts within the worker (Williams, 1978).

Expectancy theory's deceptively simple approach for calculation and explanation of worker motivation has
engendered a substantial grouping of critical reviews. Over fifty available studies test the validity of expectancy theory's approach to predicting employee behavior. Almost without exception, the studies confirm the predictions of the theory (Nadler and Lawler, 1977). In spite of these encouraging results, the studies also indicate some problems with the model. Two major problems are readily apparent.

One problem has to do with the model itself. The model is based on the assumption that workers make very rational decisions after a thorough exploration of all the available alternatives. A further assumption is that workers weigh the possible outcomes of all their alternatives. However, research observations reveal that individual decision-making processes are rarely this thorough. The decision-making process usually terminates before individuals determine if other possibilities are more desirable than their original choice. The model may indicate a more complex decision-making process than actually takes place for most people (Nadler and Lawler, 1977).

Another problem with expectancy theory is testing the entire model using representative groups. Some researchers believe that the theory is so complex that it exceeds the measures which exist to test it (Lawler and
Suttle, 1972). The typical measurements used to test the model are survey questionnaires that are not always scientifically validated. This testing difficulty leaves two concerns remaining. One concern is if the model can actually be tested and the other deals with the true applicability of the model.

Expectancy theory offers some direction for understanding worker behavior in relation to needs and organizational rewards. The research on reward importance suggests that promotion and pay are the two most important extrinsic rewards that most organizations offer their employees. However, the research also suggests that there are large individual differences in the degree to which these rewards are valued or have a high universal valence (Lawler, 1973). Needs for esteem, recognition, and self actualization are considered by expectancy theorists as determinants of valence (Porter and Lawler, 1969).

Regardless of their differing perspectives, theories of or approaches to worker motivation offer a common theme. The ability to influence employee motivation is crucial to the effective management of organizations. However, before organizations can influence their employee's motivation, they must begin by knowing who their employees are and how they react to their jobs. The extent to which worker motivation exerts
a direct impact upon productivity in a given situation requires careful documentation of the quality of employee performance (Gordon, 1982). An approach for increasing this necessary knowledge about a selected employee population with the ultimate goal of enhancing an organization's potential for influencing worker motivation is suggested in the literature.

Profile Perspective

One approach for enhancing existing knowledge about the complex relationship between worker and job is to utilize a composite assessment of salient factors affecting the relationship. A comprehensive composite is a profile of worker values, needs, reactions to the design of the work, and job satisfaction. Correlating these factors with job performance completes the profile assessment task.

This method is partially based on a major approach to organizational research. The research recommends the study of individual differences within a single organizational context (Herman and Hulin, 1972). As a methodology, the profile studies a group of individuals who assume the same organizational role or have the same job title. Though no two work positions are ever completely alike, the major variables included in a profile should identify significant differences of
interest to organizations. Previous investigations utilize a similar approach to obtain a clearer understanding of managerial values which are believed to shape behavior (England, 1975).

Worker characteristics and reactions to the job itself combine to determine job satisfaction and productivity. The profile enhances the usual treatment of worker characteristics which only considers basic demographic information. One investigation of nursing specialties, draws the conclusion that specific job responsibilities affect performance, job satisfaction, and individual work motivation (Joiner et al., 1982).

Another investigation recommends a slightly different approach. To identify individual differences in attitudes, Stone and Porter (1975) recommend determining the relative power of job characteristics and organizational variables for explaining the differences. Another researcher stresses the importance of knowing the comparability of external work features and the internal attitudes workers bring to the job (Locke, 1976). The profile can comprehensively embrace all of these recommendations.

Managers

Understanding the nature of job perceptions held by people in management positions is appropriate for the
study of organizational problems (Porter, 1961). First-line managers are particularly important because they translate and transmit organizational goals and objectives through those who report to them. To operationalize organizational objectives, these managers must maintain a high motivational level for their own positions (Porter et al., 1976).

Unmotivated managers are unlikely motivators of workers under their direction (Herzberg, 1976). The impact of manager's motivation for their own positions makes a crucial difference in directing the performance of others. With regard to the sufficiently complex and difficult nature of these positions, an ironic aspect of managerial life is that high effort alone does not guarantee good managerial performance (Lawler, 1973).

Studies of managerial success offer some information and direction. One investigation of managerial achievement and risk-taking behavior concludes that the interaction or fit between personal work orientations and organizational climate makes a significant contribution to the variance in career success among managers (Ansari et al., 1982). Current research findings are still presenting challenges, especially in relation to determinants of success for managers.
As leaders in managerial research efforts, McClelland and Boyatzis (1982) offer another perspective. They believe that researchers still do not know how some personality characteristics relate to success in management. Hackman and Oldham (1980) encourage other researchers to continue in their attempts to identify attributes of people that reliably predict effective supervisory performance.

The literature suggests an additional approach that focuses on a special aspect of managerial success as it relates to motivation. Managerial success can be viewed in relation to identified, recent job performance because motivation and job performance form such a highly positive correlation to one another (Hackman, 1977). Managerial job performance can be correlated with values, needs, and job reactions to more specifically identify managerial job motivation. These components can form a managerial profile.

MANAGERIAL PROFILE COMPONENTS

Worker Values

A number of reasons underscore the necessity for an organization's gaining some insight into its worker's values (McMurry, 1963). Worker values and the meaning of work is shifting (Mindell and Gordon, 1981). In addition
to requests for increased employee benefits, contemporary workers want a voice in decision-making and company policy formation (Mowday et al., 1982). In fact, this recent alteration in employee's values constitutes one of the most important changes affecting worker motivation in over thirty years (Lawler, 1982).

Individual behavior is best understood as being related to and/or determined by personal values and value systems (Sikula, 1971). For workers, their values have the potential to explain key aspects of job satisfaction. Identification of employee values is essential because of its impact upon productivity and profitability. Thus, knowledge of critical work-related employee values can assist organizational efforts to increase productivity (Jackson and Mindell, 1980). Some value definitions can further direct this discussion of value's impact upon work behavior.

A value is a single and enduring belief that guides actions and judgments more than attitudes (Rokeach, 1969). Because they are determinants of attitudes and behaviors, values describe and explain differences and similarities between people (Connor and Becker, 1975). Work value systems are constellations of attitudes and opinions with which people evaluate their jobs and work environment (Pennings, 1970). Values are conceptions of what is
important to a person and, as such, instigate behavior (Kluckhohn, 1962). Value identification clearly offers insight into worker behavior.

Identifying the relationship between managerial values and organizational performance has the potential for improving organizational effectiveness (Ryan et al., 1981). Two general facts about values support the pursuit of this knowledge. First of all, there is no question that value conflicts exist within organizations (Brown, 1976). Also, values outline rules for making choices and resolving conflicts (Rokeach, 1969). Organizations must know how their managers resolve conflicts and make choices.

Personal work values determine managerial job performance (Ryan et al., 1981). In fact, values are directly related to indices of managerial success (Posner and Numson, 1981, a). Managers are experiencing fewer incentives to perform well because some of the major rewards for good performance are missing (Cooper et al., 1979). Managerial values include a dedication to excellent performance for themselves and those who report to them. Organizations must outline a method for measuring managerial values so they can ascertain how managerial values determine performance.
The measurement of values is based on some assumptions about its impact on behavior. Values are a system of beliefs that outline a frame of reference or standard against which behavior is judged. Consequently, values offer predictive merit and practical utility for attempts to understand behavior (Cofey and Appley, 1964). Values are the most useful way to access information about the intricate forces motivating behavior in the work arena (Brown, 1976). Work values describe internalized need states (Deitrich, 1977). Though values clearly direct work behavior, their measurement methodology remains controversial.

Several approaches to the measurement of values are available for the organizational researcher. Sociology proposes the interview method to test values directly. Researchers ask respondents about how they handle certain situations and which of their values influence their behavior. This approach is unfortunately unable to reach the high level of abstractions at which value orientations are conceptualized (Kluckhohn and Strodbeck, 1961). This method is cumbersome and very time consuming.

Another method is the essay approach to value identification. Participants utilize an autobiographical approach to recounting certain life events. Content analysis reveals instances of clear reliance upon value
systems to direct behavior. The essay methodology offers some promise but is plagued by some significant, inherent psychometric difficulties (DeVolger and Ebersole, 1981).

There is a surprisingly small number of scales that measures values directly. However, measuring values by using some type of scale is presently the most viable approach available. In fact, the value profile offers the best methodological alternative (Connor and Becker, 1971).

England's investigations of values as determinants of behavior feature managers. His years of research with managers outline a value framework which includes a set of reasonable assertions, a model, and a resulting instrument. Fundamental to his value theory is the belief that manager's values influence their interpersonal relationships, decision-making, problem solving, and acceptance of or resistance to organizational pressure and goals (England, 1967). Managers make choices regarding problems and decisions which reflect their value systems.

England's model is designed in relation to managerial characteristics. Values are divided into categories relevant to managerial life. The values assessed form groupings concerning business goals, groups of people, ideas associated with people, personal goals of individuals, and ideas about general topics (England, 1975).
England's model for understanding and identifying values is unique because it recognizes several classes of overlapping values. Values can be conceived, operative, or intended. Conceived values are comprised of operative values, intended values, and adopted values. Operative values have a relative probability of being translated from the intentional state into actual behavior. Intended values are viewed as important but may have only a moderate probability of being translated from the intentional state into behavior because of situational factors. Adopted values are less a part of the personality structure and affect behavior only because of situational factors (England, 1975).

Completion of England's instrument reveals many important aspects of a manager's value system. The primary mode of valuation uses an importance scale because the general value of an object or idea is largely a function of its degree of importance to a person (England, 1975). Managers functioning at the same organizational level can be compared in relation to their primary mode of valuation with regard to assessed performance. This comparison should reveal which values translate into which types of behavior within an organization.

England's model also offers three secondary modes of valuation. The pragmatic mode of valuation identifies
a manager as guided by success-failure considerations. The ethical-moral mode implies an evaluative framework. The ethical-moral manager's behavior reflects actions and decisions judged to be right and in opposition to those judged wrong. The affective mode suggests an evaluative reference guided by hedonism. Managers with an affective mode of valuation behave in ways that increase pleasure and decrease pain (England, 1974).

England's approach to values measurement continues to receive attention in the literature. One study utilizes his approach to determine success differences between black and white managers (Watson and Williams, 1977). Another investigation uses it to review gender in managerial values (Posner and Munson, 1981, b). Other studies scrutinize the instrument's psychometric potential (Clare and Sanford, 1979; Posner and Munson, 1981, c). Krausz's findings caution not to isolate the measurement of values without regard for personal needs (Krausz, 1982).

Personal Needs

The impact that meeting personal needs has upon personality disposition continues to capture professional psychological interest in addition to vast public media attention (Maloney, 1979). Maslow remains prominent in
reference to a convenient framework for understanding need fulfillment.

Maslow (1970) offers a set of hypotheses that explains how the satisfaction of human needs affects their importance. For Maslow, needs exist in a hierarchy. Therefore, individual behavior is motivated by an attempt to satisfy the need which is most important at any particular time. After satisfaction, attention is focused on the fulfillment of other needs (Maslow, 1970).

The application of Maslow's theory to the work setting has almost revolutionized contemporary opinions about worker's needs in relation to their jobs. Research efforts identify clear differences among worker needs (Steers and Braunstein, 1976). These differences are definitely related to personal needs, particularly with respect to individual worker structures (Cawsey et al., 1982).

Because of its particular significance, one study continues to be replicated. Participants in the study ranked fourteen job factors from five different perspectives to compare self-perceived needs. Worker, managerial, and union perspectives reveal very interesting differences (Gluskinos and Kestelman, 1971). Findings identify that workers rank their own needs in a very
different order from others ranking how they would estimate workers to rank their needs.

Similar to Maslow's need framework is Herzberg's (1966) Two-Factor Theory. Herzberg offers organizational researchers some direction for the categorization of work satisfiers and dissatisfiers. Work satisfiers and dissatisfiers are not opposites. Herzberg's conceptualization of satisfiers as separate from dissatisfiers clearly establishes that job satisfaction is not simply the absence of dissatisfaction (Maier, 1971).

Work satisfiers are related to motivators which are internal factors. Work dissatisfiers are related to hygiene factors which are external (Herzberg, 1966). Herzberg's factors are similar to Maslow's lower-order needs and motivators reflect Maslow's conceptualization of higher-order needs.

As a result of recent research scrutiny, Herzberg's and Maslow's contributions suffer from similar criticisms. Despite the general acceptance of his approach, Maslow's need hierarchy is difficult to test and receives little research support (Lawler and Suttle, 1971). When physiological needs are reasonably well satisfied, there appears no way to predict which of the higher-order needs increases in importance for a particular person (Williams, 1978).
Herzberg's theory points attention directly to the enormous significance of the work itself as a factor in the ultimate motivation and satisfaction of employees. Regardless of this important contribution to available information explaining employee motivation, researchers are unable to provide empirical support for the major tenets of Herzberg's theory because of its severe practical difficulties when applied to the planning and implementing of actual job changes (Hackman, 1977).

Herzberg's theory is useful in focusing attention upon the importance of job content factors as related to job satisfaction (Williams, 1978). However, his theory appears to be an oversimplification. Repeated factor analytic studies of job attitudes fail to demonstrate the existence of two independent factors corresponding to motivators and hygiene factors (Campbell et al., 1976).

Though research findings cannot completely embrace the broad scope of their theories, Maslow's pioneering work and Herzberg's significant contributions continue to make an impact upon current speculations about worker needs. Many motivational theorists believe that most life situations have the potential for frustrating or fulfilling individual needs. Individual attitudes and motivation result from the action of the need-fulfilling
and frustrating properties of situations (Salancik and Pfeffer, 1978).

With respect to the work setting, particular kinds of employee needs are receiving extensive research attention. These needs are loosely referred to as growth needs. They are similar to Maslow's conceptualizations of self-esteem needs. With regard to the complementarity between workers and job, growth needs gain importance. The theory states that workers with strong growth needs respond more positively to enriched jobs than workers with weak growth needs (Champoux and Peters, 1980; Hackman and Oldham, 1980; Helphingstine et al., 1981; Quastel and Boshier, 1982).

Psychological needs determine worker's motivational responses to their jobs. The application of this belief states that workers with strong growth needs require challenging jobs to experience high motivation to perform well (Hackman and Lawler, 1971; Hackman and Oldham, 1976). Growth needs concern needs for personal accomplishment, for learning, and for continuing development. The strength of growth needs determine the extent to which employees experience internal work motivation. Hackman and Oldham's (1980) theory of internal work motivation is explained more completely in the section reviewing worker reactions to job design.
A variable often used to moderate the relationship between job characteristics and job reactions is higher-order need strength. Higher-order need strength is the impact which the self esteem needs like recognition, achievement, and accomplishment exert. As a variable in needs-related research, higher-order need strength is the variable that shows the most consistent relationship between job characteristics and job satisfaction (Brief and Aldag, 1975). The empirical identification of this relationship reveals the finding that workers wanting to meet their higher-order self esteem needs seek positions offering personal growth, accomplishment, and achievement.

The notable work of Stone et al. (1977) attempts to detect the effects of need for achievement and need for autonomy upon the relationship between job satisfaction and job scope. The Stone et al. (1977) research efforts distinguish themselves by their reliance upon robust statistical treatment of the research data. Their approach to the data reveals that the need for autonomy and the need for achievement show varying degrees of covariance with both the independent variable of job scope and the dependent variable of job satisfaction (Stone et al., 1977). The credibility of the Stone et al. (1977) findings is due to their rigorous adherence to strict research protocol.
The findings of Stone et al. (1977) continue to form the basis for subsequent research. One such major project undertaken by Terborg and Davis (1982) reviewed employee reactions to enlarged jobs. Terborg and Davis (1982) wanted to empirically test the belief that enlarged or enriched jobs meet higher-order worker needs for personal development. To test the assumptions that enriched jobs can satisfy higher-order needs, five different treatment groups performed two different tasks, one enriched and one not enriched. Their efforts proved that enlarged jobs do meet higher-order worker needs for personal development. This conclusion is based on rigorous statistical treatment of these data (Terborg and Davis, 1982). The work of both Stone et al. (1977) and Terborg and Davis (1982) is relevant for understanding managerial job needs.

Porter's work attains unique status for two major reasons. First of all, he not only identified an important employee group worthy of research attention, but also, he compared different levels of managers to one another. Secondly, Porter investigates these manager's differences of perceived deficiencies in need fulfillment (Porter, 1962; 1963). Porter developed his own instrument that measures level of need satisfaction with respect to perceived deficiencies.

Porter's findings offer a special perspective on managerial life. His data substantiated the fact that managers perceive a lack of satisfaction with their opportunities to obtain the amount of self actualization they want from their positions. He further identified that need deficiency decreases as the managerial level increases (Porter, 1962; 1963).

Porter's findings continue to direct similar investigations despite a major investigational flaw. Porter clearly outlines the necessity for identifying the extent to which managers believe their needs are being met. This research contribution is marred only by Porter's reliance upon Maslow's belief that needs are segregated into several distinct categories of ascending order. Investigations attempting to identify and assess managerial needs are encouraged to utilize an approach
different from Maslow's need theory. An alternative to Maslow is provided by Murray (1938) whose work offers a theoretical framework and the foundation of an instrument for measuring the needs he identifies.

No one has subjected the concept of need to so careful an analysis nor provided the complete taxonomy of needs that Murray offers. The conceptualization of needs is the basis for Murray's theory of motivation. He views needs as concepts that represent a force. This force organizes perception, cognition, and action to direct behavior to alter unsatisfying situations. Needs can be set into action by either external stimulation or internal arousal. Regardless of its source, a need stimulates people to act and maintain their activity until a situation is sufficiently altered to reduce the need (Murray, 1938). Though Murray's need theory is one of many such theories in psychology, very few other theorists have subjected the concept to his careful analysis or provided such a complete taxonomy (Lawler, 1980).

A major component of Murray's taxonomy is his list of 20 needs derived from intensive study of his clinical patients. His list includes abasement, achievement, affiliation, aggression, autonomy, counteraction, defendance, deference, dominance, exhibition, harmavoidance, infavoidance, nurutrance, order, play,
rejection, sentience, sex, succorance, and understanding. Murray explains each need through an outline that includes pertinent facts about each need, emotional aspects of the needs, illustrations of the needs, and questionnaire items to measure the needs (Murray, 1938).

The Edwards Personal Preference Schedule (EPPS) is an instrument designed to measure needs and, as such, is appropriate for use with a managerial population. The EPPS measures a number of relatively independent normal personality variables (Lanyon and Goodstein, 1971). The EPPS variables originate from Murray's (1938) list of manifest needs and include: achievement, deference, order, exhibition, autonomy, affiliation, intraception, succorance, dominance, abasement, nuturance, change, endurance, heterosexuality, aggression.

Responses to Job Design

Maslow's, Herzberg's, and Porter's research on needs and motivation is giving new meaning to research in the area of job satisfaction. Current beliefs about employee needs assume that workers want job feedback to gauge their progress (Hackman and Oldham, 1980). The desire for job feedback represents an instance in which an individual need makes an impact upon affective job responses. The design of a job may frustrate or fulfill the meeting of this need for feedback.
Employee's job design responses form the component of job satisfaction that concerns reactions to the design of a job's specific characteristics. Job characteristics, also referred to as job tasks, are the several broad categories that define a job's major responsibilities. For example, a large management consulting firm may employ a number of workers with the title Staff Psychologist. Their job characteristics are determined by a thorough job analysis and include evaluating, counseling, and supervising. The way in which their job's characteristics or tasks are to be performed determines their job's design (Zedeck & Blood, 1974). The Staff Psychologists obviously have responses to how these tasks are designed. Job design can determine job satisfaction (O'Reilley et al., 1980).

Attention to worker's job design responses is gaining prominence as a research topic in the organizational literature. One study attempted to assess the impact of job design responses upon job satisfaction (Ferratt et al., 1981). This research effort is distinguished by its recommendation that prior to offering any conclusive data, worker job design reactions and general job satisfaction responses must be measured by two different instruments. These instruments are recommended to have separate and distinct purposes and accompanying
theoretical frameworks to ensure that assessment of the interaction between job reactions and job satisfaction can be undertaken as precisely as possible.

Job characteristics form the basis for many investigations into job design responses (Arnold, 1976; Brief and Aldag, 1975; 1978; Brousseau, 1978; Dunham, 1980; Ferratt et al., 1981; Hackman and Lawler, 1971; Lawler et al., 1973; Oldham, 1976; Pierce, 1978; Roberts and Glick, 1981; Smith et al., 1969; Terborg and Davis, 1982; Wanous, 1974). These investigations usually rely upon a job characteristics model. Job characteristics models are an outgrowth of earlier notions that positive or negative feelings about one job aspect may confound reactions to other job aspects and result in an overall negative or positive response (Smith et al., 1969). Job characteristics models are prominent because they provide a framework for observing how the interactions between jobs and workers determine job reactions (Roberts and Glick, 1981). As a dominant paradigm in the job characteristics literature, Hackman and Oldham's (1980) model offers some clear direction for understanding job responses (Champoux, 1981).

Hackman and Oldham's (1980) job characteristics model combines behavioral and systems theory principles to form a theory of individual motivation (Green et al.,
1979). To form their hybrid model, they utilized the behavioral approach's common objective for designing work in a way that achieves high work productivity without incurring the human costs associated with many traditional approaches. Systems theory emphasizes creating work systems in which the social and the technical aspects of the work systems are integrated and are as supportive of one another as possible (Hackman and Oldham, 1980).

Hackman and Oldham's job characteristics model contains several significant aspects. It focuses on the actual work which employees perform in organizations. The model separately considers the design of work for individuals and the design of work for groups. It explicitly considers both individual differences in how people react to jobs and those aspects of the systemic context that affect the feasibility and potency of work redesign. Their model emphasizes the importance of collecting diagnostic data about a work system before changing it. Also, it highlights the connections between basic theory about behavior in organizations and practical technologies for the design and possible redesign of jobs (Hackman and Oldham, 1980). Organization's existing tendency is to attribute job difficulty to the worker rather than to the job situation (Jones, 1971). The goal of job redesign is to achieve positive worker-organization
relationships by adapting jobs to workers as much as by adapting workers to jobs (Hackman and Oldham, 1980).

In their review of job design, Hackman and Oldham address how well workers are matched with their jobs. To do this they utilize their model to identify the extent to which a job's design is motivating or has the potential to motivate a worker. The model also locates aspects of a job which are causing difficulty and making an impact upon productivity. Hackman and Oldham (1980) define productivity as the quality of the relationship between people who do the work and the jobs they perform. Well-designed jobs address worker needs for personal growth and development, and needs for meaningful social relationships. Hackman and Oldham believe (1980) that these basic, personal needs determine the match between worker and work.

The job characteristics model developed by Hackman and Oldham (see Figure 1) outlines three critical psychological states that must be present for strong internal work motivation to develop and persist. These three critical psychological states are the experienced meaningfulness of the work, the experienced responsibility for outcomes of the work, and knowledge of the actual results of the work activities (Hackman and Oldham, 1975). By definition, these three psychological states are
FIGURE 1

JOB CHARACTERISTICS MODEL

CORE JOB CHARACTERISTICS  -----------------  CRITICAL PSYCHOLOGICAL STATES  -----------------  OUTCOMES

SKILL VARIETY
TASK IDENTITY  -----------------  EXPERIENCED MEANINGFULNESS OF THE WORK
TASK SIGNIFICANCE

AUTONOMY  -----------------  EXPERIENCED RESPONSIBILITY FOR OUTCOMES OF THE WORK

FEEDBACK FROM JOB  -----------------  KNOWLEDGE OF THE ACTUAL RESULTS OF THE WORK ACTIVITIES

(Hackman and Oldham, 1980, p. 83)
internal to workers and can be directly manipulated by the design or management of the work (Hackman and Oldham, 1980).

Hackman and Oldham's job characteristics model illustrates that the three critical psychological states are influenced by several core job characteristics. The five core job characteristics are skill variety, task identity, task significance, autonomy, and feedback from the job. Hackman and Oldham (1980) believe that these core job characteristics are objective, measurable, and changable properties of the work itself. Also, each core job characteristic directly influences one of the three critical psychological states.

Each core job characteristic has a different definition and function. Skill variety includes the variety of different activities necessary to perform a task and the number of different skills and talents required of the employee. Task identity encompasses a worker's ability to complete a task from beginning to end as opposed to work on only a segment of it. Task significance is the degree to which a job task makes a substantial impact on the lives of others whether in the immediate organization or the world at large (Hackman and Oldham, 1980). These three core job characteristics
directly influence how meaningfully the job is experienced by the worker (Hackman and Oldham, 1980).

The two remaining core job characteristics, autonomy and feedback from the job, influence two other critical psychological states. Autonomy influences how workers experience responsibility for outcomes of their work. Hackman and Oldham (1980) believe that autonomy is the degree to which a job offers substantial freedom, independence, and the ability to schedule work and determine the procedures to be used in carrying it out. The amount of feedback a worker receives directly affects the critical psychological state of knowledge of the actual results of the work activities. Hackman and Oldham believe that job feedback should provide workers with clear information about the effectiveness of their performance. Job feedback is so crucial that it directly affects work motivation (Arnold, 1976).

Critical review of their job characteristics model addresses two lingering uncertainties about Hackman and Oldham's core job characteristics and their beliefs about worker needs. Dunham (1980) is not convinced that Hackman and Oldham's set of core job characteristics is complete and if theirs is the optimal method for combining dimensions to maximize worker responses. O'Reilley et al. (1980) do not believe that individual needs are stable
enough to judge every job by these criterion. Additional criticisms focus on the instrument developed from this model, the Job Diagnostic Survey (JDS).

**Job Satisfaction**

Though many factors influence it, job satisfaction encompasses a broader spectrum than worker responses to job design (Vroom, 1964). A broad approach to job satisfaction concerns the employee and work setting. As stated in a previous section, job satisfaction is a function of both the worker and the environment (Lewin, 1938). This concept was considered revolutionary when it was first presented. This single perspective ushered in a new wave of thinking about and responding to the realm of worker reactions. Individual needs, motivation, personal characteristics like demographic descriptors and values, and responses to organizational climate began to be considered in relation to job satisfaction.

As a complex aspect of organizational life, job satisfaction continues to receive research attention. The past thirty years evidence thousands of studies devoted to understanding the multifaceted concept of job satisfaction (Lawler, 1973). The years of research leave a legacy of assumptions, continuing debate, and some proven facts. To begin untangling this complex maze of ever-changing
direction, some fundamental approaches to the definition of job satisfaction are considered.

Job satisfaction is usually described in affective terms. The pioneering work of Smith et al. (1969) found that feelings about a job and facets of the job constitute job satisfaction. A later researcher describes job satisfaction as an emotional response which results from the appraisal of work experiences (Locke, 1976). For Slavitt et al. (1978) job satisfaction is the extent to which workers respond positively to their jobs. These vague descriptions are problematic because they do not identify what aspects of a job cause satisfaction and why certain job characteristics do not result in universal positive reactions.

Several researchers and theorists offer their perspective on job satisfaction and work motivation. Herzberg's (1966) major contribution to our understanding of job reactions is that motivation comes from the work itself. Maslow (1970) reminds us that when personal needs are met through the job, employees can experience job satisfaction. Lawler (1973) identifies particular job factors which can create positive job responses. Vroom (1964) links job motivation to work performance. Hackman and Oldham (1980) outline a theory of work motivation which connects job reactions to the design of the work.
Implementing these approaches creates a major challenge for the measurement of job satisfaction.

Smith's (1969) research team not only offers one of the most comprehensive approaches to the measurement of job satisfaction available but they also have developed a measuring instrument and established guidelines still widely utilized. Their studies demonstrate some generality of discriminant and convergent validity for several aspects of job satisfaction. Their efforts are respectful of the question of validity which is a major difficulty in all attitude measurement. Their resulting instrument measures individual differences which are related to the affective domain and also to behavior, situation, and personal variables.

Establishing validity for a measure of job satisfaction presents significant challenges for two primary reasons. Job satisfaction instruments are necessarily self-report questionnaires and consequently open to bias. Also, debate continues about what constitutes the salient factors to measure (Wanous and Lawler, 1972). Howell (1976) found that several job satisfaction instruments provide a standardized, but not necessarily reliable and valid, means for measuring the most critical aspects of job satisfaction. Terborg et al. (1982) concludes that variables like pay, satisfaction
with the work itself, and satisfaction with co-workers are variables for which validity can be established.

Ferratt et al. (1981) reviewed several measures of perceived job design and job satisfaction. Their findings recommend using the Job Diagnostic Survey (JDS) and Minnesota Satisfaction Questionnaire (MSQ) together. Though the JDS does not offer a general job satisfaction score like the MSQ, each measures many similar job aspects. The correlation of these similar aspects should enhance an understanding of any worker sample with respect to their job reactions.

Managers, as a worker sample, are experiencing less job satisfaction. In the last seventeen years, the percentage of managers perceiving improvement in their companies continues to steadily decline. Expectations for advancement are the lowest ever. Managers believe that the major rewards for good performance are missing (Cooper et al., 1979). Between 1973 and 1977, the sharpest decline in job satisfaction is among college graduates. Hrebinjak and Alutton (1982) found that occupational features are more important than individual characteristics in determining job satisfaction. Occupational features are what a job offers the worker in terms of challenge, stimulation, recognition, and the opportunity to experience a sense of accomplishment.
Individual characteristics concern what the worker brings to the job in addition to expectations for complementarity between the job and these individual characteristics.

**Performance Appraisal**

To assess employee job performance some type of appraisal methodology must be selected from the vast number of approaches available. Approaches range from the simple listing of strengths and weaknesses to highly complex computerized approaches that offer few insights into the superiority of one over another. Major agreement surrounds the purpose of performance appraisal. The appraisal system must assess behaviors and therefore address what results are attained, as well as the methods used to attain them (Carroll and Schneier, 1981). The major systems utilized are worthy of some mention.

One of the oldest forms of appraisal is the essay method which is still widely used as a reference format. The essay approach utilizes a statement written by someone who knows the employee well. This lends credibility to the essay and is considered as valid as more formal and extensive methods. A major drawback of the essay is its variability with relation to content and form. Essays are difficult to compare and contrast. Over time essays cannot always be relied upon to show progress in an
employee's work habits. In terms of performance appraisal, their utilization appears very limited (Oberg, 1971).

The global rating form is similar to the essay format. A global rating is a uni-dimensional format by which an evaluator formulates an overall estimate of a worker's job performance. The global rating does not distinguish between or emphasize identification of dimensions or critical job elements. The uni-dimensional approach is remiss in giving specific feedback. It is a poorly equipped tool to identify training potential. Also, needless to say, its measurement accuracy is very questionable (Schneier and Beatty, 1979).

A more consistent and reliable instrument than the uni-dimensional global rating scale is the graphic rating scale. The graphic rating scale measures performance by using a five-point scale that assesses the quantity and quality of work produced. Factors that concern how effectively and efficiently work assignments are accomplished, worker initiative and responsibility, and additional items like attendance are usually included in the graphic rating scale. The graphic rating scale uses a format which is essentially a trait-based approach to appraisal. Workers are evaluated on personality traits like loyalty, demeanor, and responsibility.
Several factors recommend and detract from the graphic rating scale. The form is comparatively inexpensive to develop and because of its straightforwardness it is acceptable to most raters. If it were supplemented with a few essay questions, the graphic rating scale appears adequate for most appraisal purposes (Oberg, 1972). However, there are several measurement issues concerned with the evaluation of dimensions like loyalty, dependability, and cooperation. The traits themselves are essentially subjective and ambiguous. This type of appraisal format is typically not sufficiently job related to accurately describe work performance (Schneier and Beatty, 1979).

Efforts to reduce bias and subjectivity in the graphic rating scale have resulted in a different type of forced-choice instrument for appraisal purposes. The forced-choice instrument establishes objective standards of comparison between individual workers. In its most common variation, raters select from a group of statements those that best and least reflect or describe the ratee. The statements are weighted, higher scores are reflective of better performance. Typically, raters are unaware of the weighting system and someone else scores the instrument. Because of its limited ability to reflect personalized descriptions, the forced-choice format can
The critical incident technique forms a true breakthrough in approaches to the appraisal process. Unlike other forms reviewed, this format includes factual incidents based on a thorough job analysis. The critical incident appraisal format lists specific performance or behavioral instances to review with respect to job performance. The emphasis on specificity and documentation help establish validity by eliminating the bias created through reliance on subjective personality characteristics. Rather than ephemeral personality characteristics feedback, workers receive specific feedback on their job behavior through identification and emphasis on actual behavior. The critical incident approach requires a great deal of supervisor time because incidents must be logged on a frequent, regular basis to describe an accurate account of a worker's behavior. Review schedules can delay giving feedback about an event which takes place long before a review is scheduled. Evaluators can set the appraisal standards without employee input which creates some negative reactions to this type of appraisal on the worker's part (Oberg, 1972).

The critical incident approach to performance appraisal is a major component of the three behaviorally-
based appraisal formats. The behaviorally-based instruments take critical incidents a step further by grouping all related incidents into one category, labeling the category and then placing the incidents in each category in priority from least to most important. Because the critical incidents are actually job behaviors, the priority system lists behaviors ranging from excellent to unacceptable performance, effective and ineffective job behavior (Latham and Wexley, 1977). Behaviorally-based instruments include behavioral observation scales, behavioral expectation scales, and behaviorally anchored rating scales.

Though the behaviorally-based rating scales offer the greatest opportunity to eliminate bias and introduce objectivity through employee input, they are expensive to develop and maintain in addition to requiring a great deal of rater time to utilize properly (Schneier and Beatty, 1979). They identify what an employee actually does (Latham and Wexley, 1977). This technique begins by identifying the circumstances surrounding specific job incidents. After considering the background or context of specific incidents, they are then grouped and placed in priority. Through a system of prioritizing the incidents on a scale ranging from excellent to unacceptable
performance, effective and ineffective job behavior is identified (Latham and Wexley, 1977).

To briefly review the history of performance appraisal instruments, several different types were described and evaluated. Included in the discussion were the essay, global, graphic, critical incident, and behaviorally-based scales. Each type of format has particular features which recommend it and other features which detract from its effectiveness. At the present time, the behaviorally-based instruments, especially the behaviorally anchored rating scale, have the greatest potential for eliminating the problem of rater bias. Though costly instruments to develop and maintain, the behavioral instruments offer the greatest potential for establishing reliability and validity of the other instruments reviewed.

A challenge to any of these existing formats is rating managerial performance. In fact, Siegel and Ghiselli (1971) believe that it is seldom, if ever, possible to measure in a completely satisfactory manner the performance of those who are engaged in executive, administrative, or supervisory functions. However, managerial performance is crucial to determine for a number of important reasons.
Managerial work performance affects managers themselves and those who report to them. Managerial performance clearly influences the relationship between job satisfaction and turnover (Spencer and Steers, 1981). Workers are influenced by the performance of those managers to whom they report. When correlated with a comprehensive review of managerial needs, values, and job reactions, managerial job performance completes a profile of these important workers in the organizational chain.

**Demographic Information**

Demographic information offers an important additional dimension for understanding any population of interest. The purpose of demographic information is to identify specific differences among workers (Wanous, 1974). To enhance knowledge of a worker sample researchers recommend several demographic areas to survey. Suggested areas of inquiry include tenure at the present organization, present job tenure, sex, age, and education (Stone and Porter, 1975; Weisman, 1979). Though demographic information is not recommended for purposes of prediction, it can be utilized to expand categorization of different kinds of data gathered regarding an employee sample.
Subjects for Investigation

Nurses, as a population of subjects for investigation, are attractive for a number of reasons. Nurses who work in hospitals are often compared to other groups of workers not working the usual day time, eight-hour period. They are a group of workers studied to identify inherent stresses of their profession, as representatives of a female-oriented profession and to determine levels of job satisfaction for a group of workers undergoing extensive internal turmoil (Aiken et al., 1981; Brett, 1983; Faver, 1982; Ginzberg, 1981; Ginzberg, 1975; Ginzberg et al., 1982; Hoppock, 1935; Imparato, 1973; Joiner et al., 1982; Katz, 1969; Kluckhohn, 1969; Larson et al., 1984; Levine, 1978; Reese et al., 1964; Rose, 1982; Slavitt et al., 1982; Slote, 1983; Smith, 1965; Wandelt et al., 1981; Weisman et al., 1981).

Nurses' job satisfaction is greatly influenced by their salary which is becoming a significant issue within the profession. Salary and job satisfaction are closely linked (Brett, 1983). Nurses claim to be substantially underpaid. In fact, nurse's incomes do not compare well with those in other female occupations (Aiken et al., 1981). For nurses there is no hierarchial pattern with a gradual approach to the higher status of physicians. They
are largely disenfranchised from equal participation in the physician's prestigious sector of medicine (Katz, 1969).

Health care economics are also working against nurse's general job satisfaction. Success of an occupational group depends in large measure upon the fortunes of both the economy as a whole and the industry to which the group is aligned. The outlook is not favorable to increase employment for nurses in hospitals and nursing homes where they are primarily employed. These traditional places of employment also do not appear favorable for places in which to significantly gain salary and fringe benefits (Ginzberg, 1981). The more education nurses attain the greater their risks for job dissatisfaction (Ginzberg, 1975).

Other aspects of the practice of nursing make maintaining high job satisfaction a challenge. In addition to the attraction of other available professions, the shrinking health care dollar, and increasing lack of respect from physicians, nurses are experiencing general difficulty with their working conditions. As a major investigator of nurse's organizational life, Wandelt et al. (1981) believe that working conditions drive nurses away from the profession.
Slavitt et al. (1978) attempted to qualify and quantify many aspects of nurse's work life. They approach the measurement problem from the direction of attitudinal measurement to permit the two types of data to be collected. Their instrument's score combines levels of perceived satisfaction with the relative importance of the various satisfaction factors. Their findings identified that nurses value autonomy very highly but are only moderately satisfied with their current jobs. They are less satisfied with task requirements, even though they believe this job component to be most important.

Their investigation utilized comprehensive statistical measures to establish reliability and validity for their instrumentation. Their principal component analysis used a Varimax rotation. Factor analysis identified that the general factors of the new components are similar to those of the original. They also used Cronbach coefficient alpha to establish internal reliability of the questionnaire. Their major recommendation is to utilize multiple regression to determine which areas are the best predictors of job satisfaction in order to produce a better tool as well as improve existing job satisfaction theories (Slavitt et al., 1978).
The difficulties nurses encounter in the practice of their chosen profession is clearly demonstrated in the literature. The difficulty with measuring their complex functioning to establish levels of job satisfaction is also addressed in the literature. Because the impact of their job dissatisfaction could be devastating for the health care delivery industry, appropriately reliable and valid instruments are necessary to measure the reactions that nurses have to their jobs. A comprehensive profile measuring the job reactions, values and needs of nurses could greatly supplement existing information about their professional job life.

Summary

Chapter II reviews the literature relevant to the salient aspects of worker motivation and its impact upon job performance. A position is outlined in which the complex aspects of motivation recommend operationalizing this variable through a suggested approach. This approach is the utilization of a profile for enhancing understanding of an identified worker population. A population sample is first-line nursing managers, Head Nurses. Worker motivation is conceptualized through individual assessments of values, needs, reactions to job design, and job satisfaction in addition to some demographic information. This comprehensive profile is
correlated with rated job performance to determine the relationship between performance and motivation.
CHAPTER III

METHODOLOGY

Introduction

Chapter III describes the design, setting, sampling procedures, subjects, assessment instruments, data collection procedures, and statistical analyses used in this study. The thrust of this investigation is to determine the correlation between specific variables and rated managerial job performance. To address this issue the following methodology is undertaken.

Design

Field studies offer the psychological researcher many advantages. The strength of field studies lies in their realism, significance, strength of variables, theory orientations, and heuristic quality (Kerlinger, 1973). Because field studies are the closest approach to real life, they cannot be faulted for artificiality. Their heuristic aspect is related to an exploratory problem-solving technique.

The field study's strengths are confounded by some inherent weaknesses. The field study is plagued by its numerous variables and variance which present constant challenges to any investigator. Variance cannot be as precisely controlled as in the experimental study. The
field study, as opposed to the field experiment, is weakened by a lack of precision in variable measurement (Kerlinger, 1973). The rationale and appropriateness of a field study design must be clearly outlined when used in any investigation.

Setting

The Head Nurses comprising the investigational sample in this study all currently work at Northwestern Memorial Hospital (NMH), a university-affiliated, teaching-medical center. The approximately 1,000-bed hospital is divided into five divisions of nursing housed in four separate pavilions. Psychiatry and obstetrics/gynecology (OB/GYN) share a facility, and the critical care, medical/surgical, and specialty nursing divisions have separate buildings within very close proximity and sharing connecting ramps. In May, 1981 NMH closed its diploma nursing school shortly after neighboring Northwestern University Medical School opened its baccalaureate nursing program.

Sampling

Because large populations make the acquisition of statistics on all members almost impossible, a sample of the population is generally utilized. The sample is any subgroup drawn by some appropriate method from a population and the method for drawing the sample is very
important (Ferguson, 1981). This investigation uses a particular type of sample and method for obtaining the sample.

Selection of a first-line nursing manager, Head Nurse, sample from the population of 1,000 Head Nurses in Chicago was done through a form of quota sampling. The sample of Head Nurses selected represents a type of purposive sample. The purposive sample is characterized by the use of judgment and a deliberate effort to obtain a representative sample by including presumably typical groups in the sample (Kerlinger, 1973).

The sample of Head Nurses is typical of other Head Nurses working in a university-affiliated, teaching medical center because of the structure of Northwestern Memorial Hospital (NMH). NMH is similar to the other six Chicago-area university-affiliated hospitals. Therefore, Head Nurses working at each institution assume similar duties and responsibilities with similar professional status and decision-making power within their particular work setting. Therefore, this study's Head Nurse sample is considered representative of Head Nurses working at institutions similar to NMH.

Subjects

The subjects in this investigation include thirty Head Nurses working at NMH between September, 1983 and
January, 1984. All Head Nurses working at NMH in September, 1983 were contacted by mail to solicit their interest in participating as subjects in this investigation. The Head Nurses who volunteered to participate responded by completing a signed and witnessed (see Appendix C) consent form and returning it to the principal investigator. Salient demographic information was obtained through the questionnaire listed in Appendix C.

The educational demographic is given special consideration because of the debate surrounding the level of entry to practice for nurses, in general. The nursing profession offers three levels of entry to practice. These are the Associate Degree in Nursing (ADN) usually granted through a community college, the Registered Nurse (RN) a diploma degree granted through a hospital-based nursing school and the Bachelors of Science in Nursing (BSN) which is a collegiate degree. Educational trends reveal a steady increase in the diploma (RN) nurses returning to colleges and universities for a BSN degree (National Commission on Nursing, 1981).

Assessment Instruments

The Head Nurses in this investigation completed four instruments in addition to the demographic questionnaire. The instruments include the Personal
values Questionnaire (PVQ), the Edwards Personal preference Schedule (EPPS), the Job Diagnostic Survey (JDS), and the Minnesota Satisfaction Questionnaire (MSQ). Descriptions of these instruments follow.

The PVQ individually measures sixty-six concepts grouped into the five classes of factors including business organizations, personal goals of individuals, groups of people, ideas associated with people, and ideas about general topics. England, the originator and developer of the PVQ, believes that the meanings managers attach to this set of concepts can provide useful descriptions of their personal value system and also be related to their behavior.

The PVQ utilizes four scales to represent four modes of valuation. To determine these modes managers respond to each PVQ concept in relation to its importance, high, medium, or low. This establishes the primary mode of valuation. Next, managers rank, 1, 2, 3, each concept as right, successful, or pleasant. This procedure determines why the managers think the concepts are important or unimportant. The secondary modes of valuation include the pragmatic dimensions represented by the successful scale, the ethical-moral area measured by a right scale, and the affective mode obtained through the pleasant scale. In this investigation only the concepts
given a rank of 1 and the primary value orientations are utilized.

Because of its exclusively managerial norm group, the PVQ is included in this investigation with only minor reservations. Although the PVQ is the instrument most often used to determine the role of values in understanding organizational behavior, there is little available information regarding its psychometric properties (Posner and Munson, 1981, c). An important quality of a measurement scale like the PVQ is its reliability. This is especially appropriate because values are considered to be consistent and enduring beliefs that guide human behavior (Rokeach, 1973).

Two separate attempts to establish reliability and validity for the PVQ are published. Available test-retest reliabilities are .37 overall for the PVQ. The five major groupings are: .35 for business goals; .44 for personal goals; .39 for groups of people; .34 for personal characteristics; .35 for general topics. All of these correlations are statistically significant (p<.05), but they account for small amounts of variance. Therefore, Posner and Munson (1981, c) consider the values measured by the PVQ to be somewhat stable. In a related study, Posner and Munson (1981, a) found that ANOVA results for a
reduced inventory of forty-five items suggest acceptable concurrent validity for the PVQ.

Two research questions concerning factorial validity and discriminant validity direct an investigation to determine the PVQ's underlying dimensionality. The investigational results reveal that the dimensions embodied in the PVQ differ from England's five value categories. The use of a five-factor solution shows that many individual items are either redundant or loaded highly on more than one factor. A reduced inventory of forty-eight items yields five factors with greater interpretability than the original sixty-six, explain a higher proportion of the variance, and ANOVA results suggest acceptable concurrent validity (Posner and Munson, 1981, a).

The PVQ is included in this study for several reasons. The PVQ is one of two existing instruments which measures values and is appropriate for use with Head Nurses. The PVQ was selected because of its exclusively managerial norm group and England's extensive research with the norm group. Continuing research efforts to establish levels of reliability and validity for the PVQ are promising. However, this study uses the PVQ as a research instrument because the instrument requires
additional scrutiny before it can be utilized without reservation.

Several PVQ concepts are to be compared with a number of EPPS concepts. These include the PVQ concepts of achievement, aggressiveness, autonomy, change, obedience, influence, compassion. England (1975), the creator of the PVQ, cautions that the impact of values on behavior must be considered in relation to additional environmental factors before making specific statements about a manager's mode of behavior in certain situations. Therefore, this investigation's profile includes consideration for the additional dimension of personal needs and the complex variable, job satisfaction.

The EPPS was included as the instrument of choice to assess Head Nurse's needs because of its extensive utilization for counseling and research (Lanyon and Goodstein, 1971). The EPPS contains 225 questions which are actually paired statements requiring a forced-choice answer. The strength of a particular need is determined by the number of times the Head Nurses select the statements representing that need. The more often Head Nurses select certain statements as being descriptive of themselves in preference to statements reflective of the other needs, the higher the score on a particular need. Low scores indicate the reverse situation. Because all
the managers in this investigation were women, their scores were compared to the percentile norms for the women's group.

Extensive research into the EPPS reveals some characteristics that further recommend the instrument. Split-half reliability coefficients of internal consistency for the fifteen personality variables or needs are presented in Appendix C. The chart lists the internal consistency coefficients and the stability coefficients. The low intercorrelations from the two normative groups indicates that the EPPS needs being measured are relatively independent. The chart also lists the intercorrelations of the variables measured by the EPPS.

Several features of the EPPS recommend and also detract from it. The EPPS is a very commonly used instrument. As such, it is also one of the more psychometrically sophisticated instruments whose test items act as stimuli for directly eliciting information about personal needs. When the EPPS was originally introduced in 1959 its forced-choice format was instrumental in removing the influence of social desirability. Social desirability describes a testee's tendency to respond to a test item according to its social desirability not its specific personality content. The EPPS forced-choice format did not remove the influence
of social desirability entirely. A problem with forced choice is that an elevated score on one need forces a lower score on another need. The EPPS has some inherent disadvantages but remains one of the best instruments available for needs identification (Lanyon and Goodstein, 1971).

The Job Diagnostic Survey (JDS) is an eighty-three question instrument. The JDS is currently the most widely used perceptual measure of job design and the job characteristics model upon which it is based represents the dominant paradigm in the job design literature (Terborg and Davis, 1982). In the JDS jobs can be assessed for their overall motivating potential. This assessment is based on the answers given on the questionnaire. The final score is multiplicative and reflects the following formula for calculations:

\[
\text{Motivating Potential} = \frac{\text{Skill Variety} + \text{Task Identity} + \text{Task Significance}}{3} \times \text{Job Autonomy} \times \text{Feedback}
\]

(Hackman and Oldham, 1980, p. 81).

The Motivating Potential Score (MPS) reflects a summary of the scores obtained on the five core job characteristics of the JDS (Helphingstine et al., 1981). Each Head Nurse completed the JDS to obtain an MPS. The Head Nurse's scores on the first three core job
characteristics of skill variety, task identity, and task
significance, were added together and divided by three.
That score was then multiplied by scores obtained on the
core job characteristics of autonomy and job feedback to
obtain the MPS. An MPS was reported for each first-line
nursing manager who participated in this study.

The literature reports several studies devoted to
clarifying the complex aspects of the JDS with respect to
reliability and validity. Dunham et al. (1977)
investigated the underlying dimensionality of the JDS
across a large number of widely varied samples of workers.
They concluded that the underlying dimensionality of the
construct tapped by the JDS is not consistent across
samples. Their finding is disputed by a later study. Lee
and Klein (1982) investigated the factor structure of the
JDS for public sector employees. Using Rao's canonical
factoring with equimax rotation to obtain factor matrices
for their sample, they found the matrices for their sample
support the a priori dimensionality of the JDS.

Helphingstine et al. (1981) investigated the influence of
the JDS moderating variables of job security, pay,
relations with co-workers, and nature of supervision upon
the MPS. Their findings for reliabilities for
correlations between the job characteristics, moderating
variables and outcome variables, and correlations between
outcome variables and individual job characteristics identify a certain range. The medians range from a low of .51 to a high of .72. Pierce and Dunham (1978) found reliability estimates typically above .70 and coefficient alpha values for the JDS core job characteristics range from .69 for feedback to .79 for autonomy. When measuring the independence among factors, Hackman and Oldham found internal consistency reliability ranging from a high of .88 to a low .58.

Additional studies report similar findings and also offer some recommendations. One study finds factor structure of the JDS to be highly dependent on the idiosyncratic characteristics of the respondents (Green et al., 1979). Other aspects included in this investigation's profile should offset this finding. Pierce and Dunham (1978) find reliability estimates typically above .70 and coefficient alpha values for the JDS scales range from .69 for feedback and .79 for autonomy. When average scores of a group of employees are obtained, the job dimension scale reliabilities are more than adequate (Hackman and Oldham, 1980). This investigation respects the recommendations to group similar job holders together to better help discriminate attitudes (Stone and Porter, 1975). Also, because levels of reliability and validity are still being established
for the JDS, this investigation treats it as a research instrument to be correlated with the Minnesota Satisfaction Questionnaire (MSQ) (Roberts and Glick, 1981).

The MSQ contains 100 questions. The questions represent twenty scales with five items each that refer to a reinforcer in the environment. The MSQ reflects a belief that if people are uniformly satisfied or dissatisfied with specific aspects of an occupation, effective reinforcers for these aspects are either available or lacking in the work environment.

MSQ answer choices are arranged on a five-point scale with 1 - low and 5 - high. Choices include 1 - very dissatisfied, 2 - dissatisfied, 3 - neither satisfied or dissatisfied, 4 - satisfied, 5 - very satisfied. The weights for the five different answer choices yield raw scores that can be converted to percentiles. Percentile scores range in one of three segments; 75 and above indicate a high degree of job satisfaction, 26 - 74 indicate average job satisfaction, and below 25 indicates low job satisfaction. The MSQ yields a general satisfaction score that reflects the percentage score ranges. The general satisfaction scores were used to determine if Head Nurses had high or low job satisfaction and their scores were then compared to performance ratings.
and also the Job Diagnostic Survey's Motivating Potential Score.

The psychometric properties of the MSQ recommend it as an appropriate choice for measuring job satisfaction. Reliability coefficients for the twenty MSQ scales range from a high of .97 to a low of .59. Of the 567 Hoyt reliability coefficients reported for twenty-seven groups, 83% were .80 or higher and only 2.5% were lower than .70. In establishing construct validity the hypothesis investigated is that satisfaction is a function of the correspondence of needs and the reinforcer system of the job. In seven of the sixteen MSQ scales studied, there is some indication that scores on the scales are related to need-reinforcement correspondence. Evidence for concurrent validity of the MSQ is derived from the study of group differences in satisfaction, especially occupational differences in satisfaction. Group differences among twenty-five occupational groups is statistically significant at the .001 level for both means and variances on all twenty-one scales (Weiss et al., 1967).

**Supervisor Rating Form**

The Supervisor Rating Form (SRF) is extrapolated from the regular performance appraisal form used to evaluate Head Nurses annually. The regular form
extensively evaluates the areas of staff management, unit management, and patient care management that all contain subsections. Therefore, the SRF contains nine questions rated on a seven-point scale. Possible total scores range from 9 - 63. Reliability and validity are not established for the SRF. However, the nine areas the SRF evaluates have been included in the Head Nurse's appraisal tool for the past twelve years.

Four instruments were selected to assess major variables that comprise the Head Nurse managerial profile. Each of these four instruments is based upon a theoretical framework that concerns worker motivation. England (1967), who developed the PVQ, believes that managerial values determine beliefs about work and direct decision making. The PVQ was included in this study because of its theoretical underpinnings and its extensive utilization with a managerial population. Murray (1939) after years of extensive research identified a group of manifest needs that he believed directed behavior. The EPPS measures fifteen of Murray's different needs and was included in this investigation because of its psychometric capabilities and extensive norm group. Hackman and Oldham (1980) believe employees are motivated to attain high performance on a well-designed job that meets their specific workers needs. Their job characteristics model's
accompanying instrument, the JDS, was included in this study because of its research potential and recommendations for comparison to the MSQ. The Vocational psychology Research Department at the University of Minnesota identified reinforcers in the work environment that contribute to job satisfaction or dissatisfaction. The MSQ assesses twenty reinforcers and offers a general job satisfaction score. The MSQ was included in this study because of its psychometric properties and the information it provides on the nurses included in its norm group. Appendix C contains statistical information about the MSQ which substantiates its tested levels of reliability.

Data Collection Procedures

The data collection procedures for this investigation have several different components. NMH approved this study with its accompanying consent form, Appendix C. Each Head Nurse employed at NMH in September, 1983 was sent a letter explaining the goals and procedures of the study. Those Head Nurses interested in volunteering to participate in this investigation returned their signed consent form in the self-addressed, stamped envelope provided by the principal investigator.

After the consent form was received each Head Nurse volunteer was given a four-digit code number and sent a
testing schedule. All Head Nurses attended two, one-hour testing sessions in which they completed the demographic sheet, the EPPS, MSQ, PVQ, and JDS, respectively. Testing sessions were held in available conference rooms at NMH during working hours. All Head Nurses regularly work the day shift so data were collected during those times.

Another data component concerns the Supervisor Rating Form, SRF, Appendix C, used to categorize performance. Each Nursing Supervisor rated all Head Nurses who report to them. Four Head Nurses report directly to Directors of Nursing, so they completed those SRF's. SRF's were returned for all Head Nurses working at NMH in September, 1983. The SRF is extrapolated from the regular performance appraisal form used to evaluate Head Nurses annually. The regular form extensively evaluates the nine areas that the SRF briefly reviews. The SRF contains nine questions rated on a seven-point scale. Possible total scores range from 9 - 63. If subjects do not group into definable high, medium, or low categories, another measure of central tendency will be used to establish performance categories.

To insure confidentiality, the SRF's were coded according to the unit where each Head Nurse was assigned. The SRF's were personally delivered to each rater in specially-marked envelopes and returned to the principal
investigator in self-addressed, stamped envelopes. These data were coded by and available to only the principal investigator.

All data were collected between October, 1983 and January, 1984. Each Head Nurse was sent a personal follow-up letter describing procedures for scheduling interviews to review their test information.

**Statistical Analyses**

The first three research questions require comparison of two different Head Nurse scores, the Job Diagnostic Survey's (JDS) Motivating Potential Score (MPS) and the Minnesota Satisfaction Questionnaire (MSQ) general satisfaction score, with the Supervisor Rating Form (SRF) scores. All three of these scores are ratio data. Therefore, to test the significance for differences between the MPS and the SRF, and between the MSQ and the SRF, the ANOVA statistic was used. The ANOVA statistic is appropriate because it provides a method for dividing the variation observed in data into different parts so that each part may be assigned to a known cause (Ferguson, 1981). To determine the correlation between the MPS and MSQ scores asked about in the third research question the Pearson product-moment statistic was used.

The fifth research question asked about a relationship between the Head Nurse's primary mode of
valuation as determined by the Personal Values Questionnaire (PVQ) and the Head Nurse's SRF scores. To analyze these data the chi-square statistic was used because it allows for comparing a set of observed frequencies with a set of theoretical frequencies (Ferguson, 1981).

The sixth research question asked about the relationship between Head Nurse's need strength as measured by the Edwards Personal Preference Schedule (EPPS) and SRF scores. Head Nurses' need scores and performance rating scores are discussed with respect to demographic descriptions. The descriptions provide a profile of the Head Nurses whose data is requested to answer the research question.

The final research question asked about the relationship between specified high EPPS needs and specified high PVQ values. A rank of 1, 2, 3 or 4 was given to each value and need because of the ordinal nature of the data. A non-parametric statistic was used to determine the correlations between needs and values because quantitative measures are not available (Ferguson, 1981).

To statistically distinguish between the different groups of performers outlined by SRF scores, discriminance analysis was used. The correlation of discriminating
variables that measures characteristics on which the
groups of Head Nurses are expected to differ include
demographic information, all factors included in the JDS
and MSQ, primary modes of valuation, and the seven
specific EPPS needs and seven PVQ values (Nie et al.,
1975).

Summary

Chapter III reviews this investigation's methodology. Included in this chapter were reviews of the
design, setting, sampling procedures, subject
descriptions, assessment instruments, data collection
procedures, and statistical analyses. Chapter IV utilizes
these statistical procedures presented in Chapter III to
present an analysis of this investigation. Chapter V
discusses the results reported in Chapter IV.
CHAPTER IV

RESULTS OF THE STUDY

Introduction

Chapter IV reports the findings obtained through the analysis of the salient variables in this investigation. These variables include job reactions, values, and needs as measured by the Job Diagnostic Survey (JDS), the Minnesota Satisfaction Questionnaire (MSQ), the Personal Values Questionnaire (PVQ), the Edwards Personal Preference Schedule (EPPS), and relevant demographic information. Interrelationships among these variables were all compared to rated job performance as measured by the Supervisor Rating Form (SRF). Demographic data were analyzed to determine categories for the above variables.

Different statistical procedures were utilized to adequately answer the seven research questions. To test the significance for differences between the JDS's Motivating Potential Score (MPS) and the SRF scores, the ANOVA statistic was used. The chi-square procedure was used to compare the differences between specific PVQ aspects and rated job performance. A Pearson product-moment statistic was used to determine the correlation between the MPS and MSQ general satisfaction scores. Discriminant analysis was utilized to determine the extent
to which different variables contribute to different performance ratings.

**Demographic Information**

Each Head Nurse reported salient demographic information through completion of a demographic questionnaire (see Appendix C). The questionnaire requested information about the nursing division to which Head Nurses reported, age, education, job tenure, years in nursing, years at Northwestern Memorial Hospital (NMH), and whether or not these nurses were hired into their positions from inside or outside the institution.

Each of the five nursing divisions was represented in this Head Nurse sample. The sample of 30 Head Nurses formed the following distribution: Psychiatry, 4; Medical/Surgical, 13; Specialty Nursing, 7; Critical Care, 3; Obstetrics/Gynecology, 3. The Head Nurses who participated as subjects in this study represented the following percentages of Head Nurses in each of their respective divisions: Psychiatry, 100%; Medical/Surgical, 81%; Specialty Nursing, 100%; Critical Care, 43%; and Obstetrics/Gynecology, 25%. The percentage of Head Nurses who participated in this study represented 68% of the total NMH Head Nurse population.

The demographic characteristics of age, job tenure, years in nursing, and years at NMH were all considered
with respect to education. The educational data were
given special consideration because of the debate
surrounding the educational preparation for a professional
nurse (National Commission on Nursing, 1981). At the
present time, three levels of entry to practice are
available to those interested in becoming a registered
nurse. These include the Associate Degree in Nursing
(ADN) that is usually granted through a community college,
the Registered Nurse (RN) diploma that is granted through
a hospital-based nursing school, and, the Bachelors of
Science in Nursing (BSN) collegiate degree granted through
a college or university. Regardless of their educational
preparation, all three types of nurses sit for the same
licensing examination. The type of educational
preparation required to become a professional nurse is
varied with each of the different educational options
leading to licensure.

The educational component of the Head Nurse's
demographic profile was segregated into three distinct
categories. These categories were: MSN/MA, BSN/BA, and
RN/ADN. A total of two Head Nurses or 7% of the sample
fit into the MSN/MA category that represented nurses with
a Masters of Science in Nursing (MSN) graduate degree or a
Masters of Arts (MA) graduate degree. A total of 20 or
67% of the sample fit in the BSN/BA category with only one
nurse who had a Bachelors of Arts (BA) degree. In the RN/ADN category there were eight Head Nurses who represented 27% of the total sample and only one nurse in this group held the ADN degree.

Table 1 categorizes the age, years at NMH, years in nursing, and job tenure characteristics of the Head Nurses according to their educational preparation. This table shows that the MSN/MA and RN/ADN nurses were very close in age to one another but were about seven years older than the BSN/BA group. The RN/ADN group distinguished itself through longevity in the years worked at NMH, their years in nursing, and their job tenure. The RN/ADN group further separated itself as the group with the least education. The group's educational status was noteworthy in relation to its long-standing membership in a profession that offers undergraduate and graduate educational opportunities and its affiliation with an institution offering a tuition reimbursement policy.

Rated Job Performance

To identify Head Nurse's job performance the nursing administrators who annually review first-line nursing managers at NMH completed the SRF's. The SRF contained nine questions to be answered on a 1-7 scale. On this scale, 1 is the lowest and 7 is the highest. The
<table>
<thead>
<tr>
<th></th>
<th>MSN/MA</th>
<th>BSN/BA</th>
<th>RN/ADN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>35.0</td>
<td>28.5</td>
<td>35.5</td>
</tr>
<tr>
<td>Years At NMH</td>
<td>5.0</td>
<td>5.5</td>
<td>9.0</td>
</tr>
<tr>
<td>Years In Nursing</td>
<td>7.0</td>
<td>8.7</td>
<td>11.25</td>
</tr>
<tr>
<td>Job Tenure</td>
<td>3.3</td>
<td>3.0</td>
<td>6.3</td>
</tr>
</tbody>
</table>

*Expressed In Means*
nine questions reviewed the three functional areas that include staff management, unit management, and patient care.

Two different levels of nursing administrator completed the SRF for each Head Nurse. Though Nursing Supervisors typically evaluate the Head Nurses at NMH, those Head Nurses who function without a Supervisor for some reason report to a Director of Nursing Service. Consequently, the nursing administrators who completed these forms were generally Nursing Supervisors but also included some Directors of Nursing Service. SRF's were completed for all Head Nurses working at NMH during the time this investigation was taking place. Nursing administrators completed the SRF's without knowledge of a Head Nurse's participation in this investigation.

The measure of central location used for description of the sample group's SRF score was the median. The median was selected because it locates the middle value of SRF scores. Also, the SRF scores were arranged in order and other variable's data were considered in relation to this middle score (Ferguson, 1981). The sample group's median was 52.5 which was close to its mean of 53.0. Consequently, the median was utilized as the appropriate measure of central tendency of the Head Nurse's SRF scores.
Data from the SRF's are displayed in Tables 2 and 3. Table 2 outlines the distribution of SRF scores for the Head Nurses who participated in this study. The 15 Head Nurses whose scores fall above the median represent each of the five nursing divisions as do the 15 Head Nurses whose scores fall below the median. Table 3 compares four characteristics of the Head Nurses whose job performance is rated either above or below the median. The table identifies these two groups of performers as the same age but age is the extent of their similarities.

The higher-rated performers had less job tenure, were employed primarily in the Critical Care and Obstetrics/Gynecology divisions, and had less education than the lower-rated performers. The lower-rated performers were Head Nurses for almost 18 months longer than the higher-rated performers, they worked primarily in the Psychiatry and Medical/Surgical divisions, and had more education. These data suggest that higher-rated performers were around 32 years old, were Head Nurses at NMH for three years, worked in the Critical Care or Obstetric/Gynecology divisions, and probably had a BSN degree. The lower-rated performers were the same age, but they were Head Nurses at NMH for almost five years, probably worked in the Psychiatry or Medical/Surgical divisions, and definitely had a BSN degree.
## TABLE 2

**FREQUENCY DISTRIBUTION OF SUPERVISOR RATING FORM SCORES FOR HEAD NURSE SAMPLE**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Psychiatry</th>
<th>Medical/Surgical</th>
<th>Specialty</th>
<th>Critical Care</th>
<th>Obstetrics/Gynecology</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>63</td>
<td></td>
<td></td>
<td>1</td>
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<td>62</td>
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<td>50</td>
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<td></td>
<td>2</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>49</td>
<td>1</td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>48</td>
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<td></td>
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<td>1</td>
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<td>12</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>
TABLE 3

AGE, JOB TENURE, NURSING DIVISION, AND EDUCATION FOR HEAD NURSES WITH BELOW-MEDIAN AND ABOVE-MEDIAN JOB PERFORMANCE RATINGS

<table>
<thead>
<tr>
<th></th>
<th>BELOW-MEDIAN JOB PERFORMANCE</th>
<th>ABOVE-MEDIAN JOB PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE MEAN</td>
<td>32.10 Years</td>
<td>32.10 Years</td>
</tr>
<tr>
<td>JOB TENURE MEAN</td>
<td>4.67 Years</td>
<td>3.23 Years</td>
</tr>
<tr>
<td>NURSING DIVISION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYCHIATRY</td>
<td>3 (75%)</td>
<td>1 (25%)</td>
</tr>
<tr>
<td>MEDICAL/SURGICAL</td>
<td>7 (54%)</td>
<td>6 (46%)</td>
</tr>
<tr>
<td>SPECIALTY</td>
<td>3 (43%)</td>
<td>4 (57%)</td>
</tr>
<tr>
<td>CRITICAL CARE</td>
<td>1 (33%)</td>
<td>2 (67%)</td>
</tr>
<tr>
<td>OBSTETRICS/GYNECOLOGY</td>
<td>1 (33%)</td>
<td>2 (67%)</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN/ADN</td>
<td>2 (25%)</td>
<td>6 (75%)</td>
</tr>
<tr>
<td>BSN/BA</td>
<td>11 (55%)</td>
<td>9 (45%)</td>
</tr>
<tr>
<td>MSN/MA</td>
<td>2 (100%)</td>
<td></td>
</tr>
</tbody>
</table>
Responses to Job Design

The first research question asked: What are the Motivating Potential Scores as measured by the Job Diagnostic Survey for first-line managers, Head Nurses, in different job performance categories? Scores on the Supervisor Rating Form (SRF) determined two performance categories, above the median and below the median. The Motivating Potential Scores (MPS) median was calculated for purposes of consistency with the SRF median. Consequently, another two groups were created with respect to how motivating the Head Nurses found the design of their jobs, MPS. A total of four groups were formed to answer the first research question. These groups and their respective demographic characteristics are presented in Table 4.

Table 4 shows that within the below-median performance category the two subgroups of Head Nurses responded differently to the design of their jobs. There were nine Head Nurses who experienced low motivation in response to their job's design while the other six found their job's design highly motivating. The major distinction between the two subgroups was in respect to their respective mean ages and mean job tenure. The Head Nurses who responded above the median to their job's design were older and had been in their jobs longer than
<table>
<thead>
<tr>
<th></th>
<th>Below-Median Job Performance</th>
<th>Above-Median Job Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below-Median Motivating</td>
<td>Above-Median Motivating</td>
</tr>
<tr>
<td></td>
<td>Potential Scores</td>
<td>Potential Scores</td>
</tr>
<tr>
<td>Age Mean</td>
<td>27.1</td>
<td>34.3</td>
</tr>
<tr>
<td>Job Tenure Mean</td>
<td>3.3</td>
<td>6.7</td>
</tr>
<tr>
<td>MSN/MA</td>
<td>1 (11%)</td>
<td>1 (17%)</td>
</tr>
<tr>
<td>BSN/BA</td>
<td>7 (78%)</td>
<td>4 (66%)</td>
</tr>
<tr>
<td>RN/ADN</td>
<td>1 (11%)</td>
<td>1 (17%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below-Median Motivating</td>
<td>Above-Median Motivating</td>
</tr>
<tr>
<td></td>
<td>Potential Scores</td>
<td>Potential Scores</td>
</tr>
<tr>
<td>Age Mean</td>
<td>32.3</td>
<td>32.0</td>
</tr>
<tr>
<td>Job Tenure Mean</td>
<td>4.0</td>
<td>2.7</td>
</tr>
<tr>
<td>MSN/MA</td>
<td>- 0 -</td>
<td>- 0 -</td>
</tr>
<tr>
<td>BSN/BA</td>
<td>1 (17%)</td>
<td>8 (89%)</td>
</tr>
<tr>
<td>RN/ADN</td>
<td>5 (83%)</td>
<td>1 (11%)</td>
</tr>
</tbody>
</table>
the nine Head Nurses whose job design motivation fell below the median. These data suggest that the older the Head Nurses became and the longer they were in their jobs, the more motivating they found the design of their jobs. The data do not indicate the necessity for an intervention strategy directed at increasing MPS for the Head Nurses in the below-median performance category.

Head Nurses in the above-median job performance category also formed two subgroups with respect to job design reactions. The majority, nine, of the nurses in this category found their job's design above the median in motivation while the other six Head Nurses did not respond above the median to their job's design. The major distinction between the two subgroups of higher-rated performers was their job tenure and education. The subgroup who responded more positively to the design of their jobs had shorter job tenure and more education.

These data indicate that Head Nurses with above-median job performance responded more positively to the design of their jobs the more education and less job tenure they had. A job redesign intervention strategy could be appropriate for higher-rated Head Nurses who experienced low job design motivation if increased education, obtaining a BA/BSN for those with an ADN/RN, does not increase MPS.
Comparison of the four subgroups with respect to demographic characteristics, job design reactions, and job performance offers some interesting considerations. The youngest subgroup had below-median performance ratings and job design responses. However, their age mean, job tenure mean, and education was most similar to the above-median performers with positive job design responses. The below-median performers who responded positively to the design of their jobs were the oldest and had the longest job tenure. The above-median performers who did not respond positively to their job's design had the least education. These data indicate that no one particular subgroup was an appropriate candidate for job redesign based on their job design reaction scores in comparison to their performance category and available demographic information.

A final comparison of MPS ratings and SRF scores was undertaken by statistical analysis. To determine the differences within and between the two Head Nurse performance groups in relation to MPS ratings, an ANOVA statistic was used. Table 5 shows that $p = .40$ was not significant. Therefore, with respect to MPS ratings, the above-median and below-median performers were not significantly different.
<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees Of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F-Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>3,139.59</td>
<td>3,139.59</td>
<td>.730</td>
<td>.4003</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>120,488.23</td>
<td>4,303.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>123,627.82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Job Satisfaction

The second research question asked: What are the general job satisfaction scores as measured by the Minnesota Satisfaction Questionnaire for first-line managers, Head Nurses, in different job performance categories? Scores on the SRF's established the two performance categories, below-median and above-median. The Minnesota Satisfaction Questionnaire (MSQ) median was calculated for purposes of consistency with the SRF median. All MSQ raw scores were converted to percentile scores according to the MSQ manual's guidelines (Weiss et al., 1967). The two medians formed four Head Nurse groups whose demographic information is outlined in Table 6.

The below-median job performance category had two subgroups whose Head Nurses experienced different levels of general job satisfaction. Within this performance category eight Head Nurses experienced below-median general job satisfaction and seven experienced above-median general job satisfaction. The Head Nurses who found their jobs generally more satisfying were older and had longer job tenure. These data indicate that job satisfaction increased as age and job tenure increased.

The above-median job performance category also had two subgroups whose Head Nurses experienced different levels of general job satisfaction. Within this
### TABLE 6

COMPARISON OF JOB PERFORMANCE RATINGS TO MINNESOTA SATISFACTION QUESTIONNAIRE'S (MSQ) GENERAL SATISFACTION SCORES

<table>
<thead>
<tr>
<th></th>
<th>Below-Median Job Performance</th>
<th>Above-Median Job Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below-Median MSQ</td>
<td>Above-Median MSQ</td>
</tr>
<tr>
<td>Age Mean</td>
<td>30.4</td>
<td>34.1</td>
</tr>
<tr>
<td>Job Tenure Mean</td>
<td>4.3</td>
<td>5.7</td>
</tr>
<tr>
<td>MSN/MA</td>
<td>1 (13%)</td>
<td>1 (14%)</td>
</tr>
<tr>
<td>BSN/BA</td>
<td>6 (74%)</td>
<td>5 (72%)</td>
</tr>
<tr>
<td>RN/ADN</td>
<td>1 (13%)</td>
<td>1 (14%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Below-Median MSQ</th>
<th>Above-Median MSQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Mean</td>
<td>30.2</td>
<td>34.3</td>
</tr>
<tr>
<td>Job Tenure Mean</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>MSN/MA</td>
<td>- 0 -</td>
<td>- 0 -</td>
</tr>
<tr>
<td>BSN/BA</td>
<td>4 (50%)</td>
<td>5 (71%)</td>
</tr>
<tr>
<td>RN/ADN</td>
<td>4 (50%)</td>
<td>2 (29%)</td>
</tr>
</tbody>
</table>
performance category eight Head Nurses experienced below-median general job satisfaction and seven experienced above-median general job satisfaction. Similar to the below-median performance category, the Head Nurses who found their jobs generally more satisfying were older than the other above-median rated nurses. The two subgroups in the above-median performance category were not further distinguished on the basis of demographic characteristics. These data indicate that general job satisfaction increased as age increased.

The calculated median for the Head Nurses' general job satisfaction reactions were below the median for sixteen and above the median for fourteen Head Nurses. The Head Nurses who experienced greater job satisfaction were older and had more education and longer job tenure. Because these data imply a relationship between increased job satisfaction and factors including age, job tenure and education, intervention strategies directed at increasing job satisfaction should necessarily consider Head Nurse's age, job tenure, and educational level.

A further comparison of MSQ general satisfaction scores and SRF scores was undertaken by statistical procedure. To determine the difference within and between the two Head Nurse performance groups in relation to MSQ ratings an ANOVA statistic was used. Table 7 shows that p
<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F-Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>.3000</td>
<td>.4000</td>
<td>.002</td>
<td>.9652</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>4337.8667</td>
<td>154.9238</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>4338.1667</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
was not significant. Therefore, with respect to MPS ratings, the above-median and below-median performers were not significantly different.

The third research question asked: What is the correlation between high Motivating Potential Scores as measured by the Job Diagnostic Survey and high general satisfaction scores as measured by the Minnesota Satisfaction Questionnaire for first-line managers, Head Nurses? To determine the correlation between these two sets of scores, the Pearson product-moment statistic was used. In this case \( r = .66, p = .001 \). This relationship was moderately positive and identified that the Head Nurses who experienced higher job satisfaction also found their jobs motivating. In fact, 67% of the Head Nurses who were rated above the median in job performance also found their jobs above the median in general job satisfaction and reactions to their job's design, MPS.

Values

The fourth research question asked: What are the operative values as measured by the Personal Values Questionnaire for first-line managers, Head Nurses, in different performance categories? Operative values were selected for consideration because they represent those Personal Values Questionnaire (PVQ) concepts that Head Nurses selected as high in importance and were reflective
of their primary value orientation. Operative values are the most likely to influence managerial behavior (England et al., 1974). The PVQ hierarchy also identifies intended, adopted, and weak values that exert a limited influence upon managerial behavior.

First, operative values were identified for both below-median and above-median performers. Next, behavioral relevance scores were assigned to each operative value. The behavioral relevance score shows the percentage of Head Nurses in each performance category who selected a value as operative. Then, values in each of the five PVQ categories were displayed in Tables 8 and 9 with respect to their behavioral relevance scores.

Table 8 shows the behavioral relevance of operative values for Head Nurses in the above-median performance category. The behavioral relevance score identifies the percentage of Head Nurses who found a value operative. For instance, organizational efficiency is the only value that was operative for over 60% of the above-median rated Head Nurses. Table 8 also reveals several clusters of values both within and across the five major PVQ categories. Closer review of the clusters can explain how these values can shape behavior (England, 1974). A cluster includes values with the same behavioral relevance score.
<table>
<thead>
<tr>
<th>Behavioral Relevance Score</th>
<th>Ideas Associated With People</th>
<th>Personal Goals of Individuals</th>
<th>Goals of Business Organizations</th>
<th>Groups of People</th>
<th>Ideas About General Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td></td>
<td></td>
<td>Organizational Efficiency</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td>Managers</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Skill</td>
<td>Autonomy</td>
<td>High Productivity</td>
<td>My Subordinates</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Ability</td>
<td>Individuality</td>
<td>Industrial Leadership</td>
<td>My Company</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Ambition</td>
<td>Money</td>
<td>Employee Welfare</td>
<td>Craftsmen</td>
<td>Conflict</td>
</tr>
<tr>
<td>30</td>
<td>Cooperation</td>
<td>Money</td>
<td>Organizational Stability</td>
<td>My Home</td>
<td>Change</td>
</tr>
<tr>
<td>20</td>
<td>Compassion</td>
<td>Money</td>
<td>Profit Maximization</td>
<td>White Collar Workers</td>
<td>Compromise</td>
</tr>
<tr>
<td>10</td>
<td>Tolerance</td>
<td>Money</td>
<td>Organizational Growth</td>
<td>Employees</td>
<td>Emotions</td>
</tr>
<tr>
<td>0</td>
<td>Loyalty</td>
<td>Money</td>
<td></td>
<td>My Co-Workers</td>
<td>Authority</td>
</tr>
<tr>
<td></td>
<td>Honor</td>
<td></td>
<td></td>
<td>Owners</td>
<td>Caution</td>
</tr>
<tr>
<td></td>
<td>Aggressiveness</td>
<td></td>
<td></td>
<td>Customers</td>
<td>Equality</td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td></td>
<td></td>
<td>Blue Collar Workers</td>
<td>Competition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stockholders</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Technical Employees</td>
<td>Property</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Employees</td>
<td>Religion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Risk</td>
</tr>
<tr>
<td>Ideas Associated With People</td>
<td>Personal Goals of Individuals</td>
<td>Goals of Business Organizations</td>
<td>Groups of People</td>
<td>Ideas About General Topics</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>------------------</td>
<td>---------------------------</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Skill</td>
<td>High Productivity</td>
<td>Employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Ability</td>
<td>Organizational Efficiency</td>
<td>My Boss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Ambition</td>
<td>Organizational Growth</td>
<td>My Co-Workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Money</td>
<td>Industrial Leadership</td>
<td>My Subordinates</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Autonomy</td>
<td>Employee Welfare</td>
<td>My Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individuality</td>
<td>Organizational Stability</td>
<td>Customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Success</td>
<td>Profit Maximisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperation</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compassion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tolerance</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aggressiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The first category, Ideas Associated with People, shows that Head Nurses determined that twelve values were operative for them. These include skill, ability, ambition, cooperation, compassion, tolerance, obedience, trust, loyalty, honor, aggressiveness, conformity. Skill, ability, and ambition are values that concern personal competence and can influence how problems and decisions surrounding these issues are solved and made. The next cluster of values includes cooperation, compassion, tolerance, obedience, trust and loyalty. These values imply a more organizationally-based compliance level (England, 1975). The final cluster including honor, aggressiveness, and conformity imply an individual orientation and influence decision making from that perspective (England et al., 1974). All three groupings in this category make some impact upon these manager's behavior in specific situations.

The second category, Personal Goals, shows that Head Nurses selected thirteen operative values. Over 50% of them identified operative values for autonomy and achievement which would influence decisions to retain these aspects of their work life. The next cluster included individuality, job satisfaction, creativity and success which imply a strong commitment to solving problems based on maintaining these personal aspects of
the job. A third cluster, operative for almost 40% of the Head Nurses in this performance category, emphasized the importance of directing problem solving to safeguard personal income. The final cluster includes influence, security, dignity, prestige, leisure, and power that direct problem solving with respect to keeping these aspects of the managerial position.

All of the factors categorized as Personal Goals can be viewed as ends toward which other values are directed. For instance, managers can maintain their influence and power through achievement, individuality and creativity. Values like security, influence, and power can also be seen as reflective of individual need structures (Maslow, 1970; McClelland, 1957). Porter (1961) discovered that autonomy as defined by managerial level greatly influenced feelings of dignity and a sense of prestige. England (1975) found that American managers believed autonomy was a goal to be obtained.

The third category, Goals of Business Organizations, shows that Head Nurses selected eight operative values. Over 60% of the Head Nurses identified organizational effectiveness as an operative value. The high behavioral relevance score of this value was typical for American managers and attests to its importance for Head Nurses, as well. High productivity and industrial
leadership also played a major role in the Head Nurse's decision making and problem solving. The next grouping of values includes employee welfare, organizational stability, profit maximization, and organizational growth and these have a less-personal connotation for managers who operationalize organizational goals through their subordinates (England, 1975). Only 10% of the Head Nurses were influenced by social welfare with respect to their managerial problem solving.

The fourth category, Groups of People, clearly distinguished the Head Nurses from England's (1975) other norm groups. The behavioral relevance scores for the values in this category ranged from the 15th to the 60th percentiles. According to their behavioral relevance scores, the Head Nurses' major reference groups included me, managers, my subordinates, and my company. Inclusion of the other reference groups like craftsmen, white collar workers and my boss addressed identification with professional groups but distinguished the Head Nurses from England's groups who selected other reference groups. Other values with lower behavioral relevance scores like my co-workers, customers, blue collar workers, stockholders, technical employees, and laborers did not form a network for identification for these Head Nurses (England et al., 1974).
The fifth category, Ideas about General Topics, received the lowest behavioral relevance scores of any category. For the high performers all of these values had a behavioral relevance score at or far below the 30th percentile. Consequently, very few Head Nurses found these values to be operative. The values they did find operative were conflict, change, compromise, emotions, authority, caution, equality, government, property, religion, rational, risk and for one person liberalism and force were operative values. Values like conflict, change, compromise and emotions reflect aspects of managerial life requiring regulation. Values concerning authority, caution, equality, rational, risk, liberalism and force connote a style of management. Values which include government, property and religion include concern for external factors sometimes having little direct impact upon managerial life (England, 1975).

Over half of the Head Nurses in the above-median performance category identified skill, autonomy, achievement, organizational efficiency, high productivity, me, and managers as operative values. These top values have a distinctly personal connotation in relation to who and what these managers consider important. England believes that these managers make their whole range of work-related decisions and problem-solving based on these
values. Because of this study's interest in a profile of different manager's performance, this value's profile is essential to compare and contrast with the other group of performers.

Table 9 shows that the below-median rated Head Nurses had fewer overall operative values than the above-median rated group. In the category, Ideas Associated with People, the lower-rated performers shared a profile similar to the higher performers. However, Table 9 identifies a higher behavioral relevance score for the value of ambition and no behavioral relevance score for the value of honor. These data suggest that the lower-rated performers were equally concerned about personal competence and some issues of organizational compliance. With respect to Ideas Associated with People, the two groups of Head Nurses can be considered to have comparable values that direct their behavior (England, 1975).

In the category, Personal Goals of Individuals, the lower-rated Head Nurses identified fewer operative values, overall. Their seven values with the highest behavioral relevance scores included job satisfaction, money, autonomy, individuality, success, achievement, and security. In contrast to the high performers, the lower performers gave a much lower score to autonomy, individuality, success and achievement. Only about one-
third of the lower performers found these values operative while well over 50% of the high performers found these values operative. These data suggest that the lower-rated performers were not as directed by autonomy, individuality, success and achievement in their decision making.

The category of Goals of Business Organizations formed a very similar profile between the two groups. The same values were included with much the same behavioral relevance scores. However, organizational growth is somewhat dissimilar for the two groups. The group of lower-rated performers gave organizational growth a higher score. England (1975) believes that a value like organizational growth connotes the potential for making personal sacrifices for the greater benefit of the total organization.

The fourth category, Groups of People, revealed several interesting differences between the two groups of performers. The lower-rated performers gave the value of employees a very high behavioral relevance score while the higher-rated performers gave it a much lower behavioral relevance score. Also, the lower-rated performers gave my boss and customers a higher score than the higher-rated Head Nurses. The lower-rated performers clearly considered employees, my boss, managers, my co-workers, my
subordinates, and my company before themselves. They also gave a much lower score to owners, craftsmen and white collar workers. Their reference groups were dissimilar from the higher-rated performers.

The final category, General Topics, had the lowest overall behavioral relevance scores for both groups. The below-median performers had a high behavioral relevance score for risk and a lower behavioral relevance score for authority than the above-median performers. These data imply that the higher-rated performers were more conservative in their decision making and used authority as a basis for problem solving. Conflict had a higher behavioral relevance score for the above-median performers than the below-median performers. These data further imply that the lower-rated Head Nurses valued risk-taking behavior but made decisions based on avoiding conflict. They also made decisions with less regard for authority which may be related to the higher value they placed on risk.

A concise value profile of the lower-rated Head Nurses finds a group with high behavioral relevance scores for skill, ability, high productivity, organizational efficiency, employees, my boss, and managers. The majority of this group valued personal assets like skill and ability but seemed less self-directed than their
higher-rated colleagues. Their reference groups included subordinates and superiors but not themselves. They would take risks but wanted to avoid conflict. These data suggest that the lower-rated performers were a less personally-ambitious group.

The fifth research question asked: What are the operative values for first-line managers, Head Nurses, with a pragmatic primary mode of valuation and first-line managers, Head Nurses, with an affective primary mode of valuation as measured by the Personal Values Questionnaire with respect to rated job performance? Primary mode of valuation was determined by England's formula of counting and categorizing the three concept descriptors of right, pleasant, and successful as each Head Nurse ranked them 1, 2, and 3. A majority ranking of 1 for the right descriptor indicated an ethical/moral primary mode. A majority ranking of 1 for the pleasant descriptor indicated an affective primary mode. A majority ranking of 1 for successful indicated a pragmatic primary mode. No majority rankings indicated a mixed mode. These determinations are based on England's research which identifies primary values orientation categories, ethical/moral, affective, pragmatic, and mixed.

The Head Nurses primary value orientations were twenty-two pragmatic, five ethical/moral, three affective,
and no mixed orientations. All four categories describe a mode of valuation characterized by a particular type of evaluative framework that guides managerial courses of action. The pragmatic and affective primary value orientations were selected for consideration because of England's descriptions of the distinctions and differences between pragmatic and affective. Identifying how these two modes of valuation distinguish themselves with respect to rated job performance was essential to determine for inclusion in the Head Nurse's managerial profiles.

The pragmatic and affective managers are directed by essentially different values. The pragmatic manager is guided by success-failure considerations and concern for whether or not particular courses of action will work. The behavior of pragmatic managers is described by concepts that they consider important and successful. The affective mode of valuation reflects an evaluative framework based on the pursuit of hedonism. The affective manager is guided by behaviors directed toward increasing pleasure and decreasing pain. The affective manager's behaviors are influenced by those concepts that they consider important and pleasant (England, 1975).

Comparison of the values of pragmatic and affective Head Nurses are outlined in Tables 10 and 11. Table 10 identifies eleven operative values with a behavioral
TABLE 10

OPERATIVE VALUES FOR TWENTY-TWO NURSES WITH A PRAGMATIC PRIMARY MODE OF VALUATION

<table>
<thead>
<tr>
<th>Ideas Associated With People</th>
<th>Personal Goals of Individuals</th>
<th>Goals of Business Organizations</th>
<th>Groups of People</th>
<th>Ideas About General Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Skill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Ambition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Cooperation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Tolerance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Obdience</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 80  |                                | High Productivity              |                  |                           |
| 70  |                                | Organizational Efficiency      |                  |                           |
| 60  |                                | Organizational Growth          |                  |                           |
| 50  |                                | Organizational Stability       |                  |                           |
| 40  |                                | Industrial Leadership          |                  |                           |
| 30  |                                | Profit Maximization            |                  |                           |
| 20  |                                |                                 |                  |                           |
| 10  |                                |                                 |                  |                           |
| 0   |                                |                                 |                  |                           |

| 80  |                                | Managers                        |                  |                           |
| 70  |                                | Co-Workers                      |                  |                           |
| 60  |                                | Me                              |                  |                           |
| 50  |                                | Employees                       |                  |                           |
| 40  |                                | Subordinates                    |                  |                           |
| 30  |                                | Customers                       |                  |                           |
| 20  |                                |                                 |                  |                           |
| 10  |                                |                                 |                  |                           |
| 0   |                                |                                 |                  |                           |

| 80  |                                | Rational                        |                  |                           |
| 70  |                                | Conflict                        |                  |                           |
| 60  |                                | Compromise                      |                  |                           |
| 50  |                                | Cautions                        |                  |                           |
| 40  |                                | Elections                       |                  |                           |
| 30  |                                | Government                      |                  |                           |
| 20  |                                | Authority                       |                  |                           |
| 10  |                                | Competition                     |                  |                           |
| 0   |                                | Property                        |                  |                           |

- Workers
- Labor Unions
- Freedom
- Liberalism
### TABLE II

**OPERATIVE VALUES FOR THREE HEAD NURSES WITH AN AFFECTIVE PRIMARY MODE OF VALUATION**

<table>
<thead>
<tr>
<th>Ideas Associated With People</th>
<th>Personal Goals of Individuals</th>
<th>Goals of Business Organizations</th>
<th>Groups of People</th>
<th>Ideas About General Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Job Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td>Employees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Money</td>
<td></td>
<td>My Company</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Individuality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Creativity</td>
<td>Social Welfare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Loyalty</td>
<td></td>
<td>My Boss</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compassion</td>
<td></td>
<td>Managers</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Individuality</td>
<td></td>
<td>Subordinates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td></td>
<td>Me</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
relevance score above the 50th percentile for the pragmatic managers. These operative values include ability, skill, ambition, achievement, high productivity, organizational efficiency, organizational growth, organizational stability, managers, co-workers, and me. Table 11 identifies four operative values with a behavioral relevance score above the 50th percentile for the affective managers. These include job satisfaction, money, employees and my company. These differences in values corroborate the primary values modes of the Head Nurses in each of these categories. The affective manager's evaluative framework emphasized job satisfaction and money while the pragmatic Head Nurse's evaluative framework emphasized personal characteristics like ability, skill, ambition, achievement, productivity, efficiency, growth, and stability. These operative values determine managerial problem solving and decision making for the Head Nurses in each of the two respective primary mode of valuation categories.

Performance ratings also distinguish the two groups with respect to primary valuation orientation. All three Head Nurses in the affective managers category were rated below the median for job performance. However, half of the pragmatic managers were rated above the median and half were rated below the median for job performance. The
demographic characteristics of the two sub-groups are not remarkably distinct. The chi-square found no significant difference between the affective and pragmatic managers with respect to job performance.

Needs

The fifth research question asked: What are the need level for achievement, aggression, autonomy, change, deference, dominance, and intraception as measured by the Edwards Personal Preference Schedule for first-line managers, Head Nurses, in different job performance categories? To answer this question all Edwards Personal Preference Schedule (EPPS) raw scores were converted to percentile scores according to the instrument's manual (Edwards, 1975). Because EPPS percentile scores range from 1-100, a score of 1-25 represented a low need level, a score of 26-75 represented a medium need level, and a score of 76-100 represented a high need level. The several EPPS needs considered for examination were selected because of their similarity to the seven PVQ values of achievement, aggressiveness, autonomy, change, obedience, influence, and compassion. Only high needs were considered because of their potential to direct behavior and the fact that need satisfaction is a discriminant aspect of many motivational theories (Cawsey et al., 1982; Cofer and Appley, 1964; Hackman and Oldham,
Tables 12 and 13 outline characteristics of Head Nurses in different performance categories with respect to their high needs. Table 12 indicates that ten Head Nurses had a high need for achievement, six had a high need for aggression, four had a high need for autonomy, five had a high need for change, thirteen had a high need for dominance, and seven had a high need for intraception. No one had a high need for deference. The numbers of Head Nurses in each need category is noteworthy because less than a third of these higher-rated performers had a high need for autonomy and two-thirds had high needs for achievement and dominance. The fact that no need was a high need for all fifteen Head Nurses in this performance category identifies a range of need levels within the category.

Discussion of other characteristics of the Head Nurses in this performance category may further identify them with respect to the six high needs. For instance, less than one-third of the higher-rated performers had a high need for autonomy, but they were the oldest group with the longest job tenure and most equally divided educational credentials. Over three-fourths of the Head Nurses in this category had a high need for dominance.
TABLE 12

CHARACTERISTICS OF HEAD NURSES WITH ABOVE-MEDIAN PERFORMANCE RATINGS AND HIGH NEEDS FOR ACHIEVEMENT, AGGRESSION, AUTONOMY, CHANGE, DOMINANCE AND INTRACEPTION

<table>
<thead>
<tr>
<th></th>
<th>Achievement</th>
<th>Aggression</th>
<th>Autonomy</th>
<th>Change</th>
<th>Dominance</th>
<th>Intraception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Age Mean</td>
<td>30.5 Years</td>
<td>29.0 Years</td>
<td>38.5 Years</td>
<td>34.0 Years</td>
<td>31.0 Years</td>
<td>32.4 Years</td>
</tr>
<tr>
<td>BSN</td>
<td>60%</td>
<td>67%</td>
<td>50%</td>
<td>60%</td>
<td>69%</td>
<td>57%</td>
</tr>
<tr>
<td>RN/ADN</td>
<td>40%</td>
<td>33%</td>
<td>50%</td>
<td>40%</td>
<td>31%</td>
<td>43%</td>
</tr>
<tr>
<td>Job Tenure Mean</td>
<td>3.5 Years</td>
<td>3.1 Years</td>
<td>4.4 Years</td>
<td>4.0 Years</td>
<td>3.0 Years</td>
<td>3.1 Years</td>
</tr>
</tbody>
</table>
### TABLE 13

**CHARACTERISTICS OF HEAD NURSES WITH BELOW-MEDIAN PERFORMANCE RATINGS AND HIGH NEEDS FOR ACHIEVEMENT, AGGRESSION, AUTONOMY, CHANGE, DOMINANCE, INTRACEPTION**

<table>
<thead>
<tr>
<th></th>
<th>Achievement</th>
<th>Aggression</th>
<th>Autonomy</th>
<th>Change</th>
<th>Dominance</th>
<th>Intraception</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td><strong>Age Mean</strong></td>
<td>33.9 Years</td>
<td>34.6 Years</td>
<td>33.6 Years</td>
<td>32.3 Years</td>
<td>32.5 Years</td>
<td>32.0 Years</td>
</tr>
<tr>
<td><strong>MSN/MA</strong></td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td>25%</td>
<td>14%</td>
<td>-0-</td>
</tr>
<tr>
<td><strong>BSN</strong></td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>75%</td>
<td>72%</td>
<td>89%</td>
</tr>
<tr>
<td><strong>RN/ADN</strong></td>
<td>20%</td>
<td>-0-</td>
<td>20%</td>
<td>-0-</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Job Tenure Mean</strong></td>
<td>5.75 Years</td>
<td>4.9 Years</td>
<td>5.6 Years</td>
<td>3.88 Years</td>
<td>4.9 Years</td>
<td>4.2 Years</td>
</tr>
</tbody>
</table>
This group had the most education and the shortest job tenure mean. Exactly two-thirds of the Head Nurses in this category had a high need for achievement. This group was in the middle with regard to age, education and job tenure mean. These data imply that Head Nurses with high needs for autonomy and change are likely to be older and in their jobs longer. Most Head Nurses have a high need for dominance. Head Nurses with high needs for achievement and aggression had more education and were younger.

Table 13 indicates that ten Head Nurses had a high need for achievement, five had a high need for aggression, five had a high need for autonomy, four had a high need for intraception. No one had a high need for deference. Table 13 also lists the mean age years, education and mean job tenure years for the Head Nurses in each need category.

Comparison of the results in Tables 12 and 13 revealed both similarities and differences between Head Nurses in the two performance categories. The numbers of Head Nurses in each category were very similar. However, no one in the above-median performance group was in the MSN/MA group. With the exception of the change category, the below-median performers had longer job tenure than the higher-rated Head Nurses. Because the mean age range for
the below-median performers was only 2.6 mean years, no one category distinguished itself as having the youngest group. However, for the lower-rated Head Nurses, the change category had a younger group with higher educational credentials and less job tenure. These data indicate that the two performance groups were not remarkably dissimilar with regard to their high needs. Combining the two groups showed that 67% had a high need for achievement, 37% had a high need for aggression, 30% had a high need for autonomy, 30% had a high need for change, 90% had a high need for dominance, and 53% had a high need for intraception.

A final comparison of EPPS needs and SRF scores was undertaken by statistical analysis. To determine the difference within and between the two Head Nurse performance groups in relation to needs, an ANOVA statistic was used. Table 14 shows that the achievement value of .78, \( p = .78 \) was not significant and there was no difference between the performance groups with respect to the need for achievement. Table 15 shows that the aggression value of .193, \( p = .66 \) was not significant and there was no difference between the performance groups with respect to the need for aggression. Table 16 shows that the autonomy value of 2.3, \( p = .14 \) was not significant and there was not a difference between the
TABLE 14

ANALYSIS OF VARIANCE FOR PERFORMANCE RATING AND
THE NEED FOR ACHIEVEMENT

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>43.2000</td>
<td>43.2000</td>
<td>.78*</td>
<td>.7819</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>15476.0000</td>
<td>552.7143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>15519.2000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant.*
**TABLE 15**

ANALYSIS OF VARIANCE FOR PERFORMANCE RATING AND THE NEED FOR AGGRESSION

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>187.5000</td>
<td>187.5000</td>
<td>.193*</td>
<td>.6639</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>27172.0000</td>
<td>970.4286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>27359.5000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant.*
### TABLE 16

**ANALYSIS OF VARIANCE FOR PERFORMANCE RATING AND THE NEED FOR AUTONOMY**

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>1628.0333</td>
<td>1628.0333</td>
<td>2.268*</td>
<td>..</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>20095.3333</td>
<td>717.6905</td>
<td></td>
<td>.1432</td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>21723.3667</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant.*
performance groups with respect to the need for autonomy. Table 17 shows that the change value of .91, p = .11 was not significant and there was no difference between the performance groups with respect to the need for change. Table 18 shows that the deference value of .50, p = .46 was not significant and there was no difference between the performance groups with respect to the need for deference. Table 19 shows that the dominance value of 1.2, p = .28 was not significant and there was not a difference between the performance groups with respect to the need for dominance. Table 20 shows that the intraception value of .39, p = .76 was not significant and there was no difference between the groups with respect to the need for intraception.

The final research question asked: What is the relationship between the needs for and values of achievement, aggressiveness, autonomy, change, obedience/deference, influence/dominance, and compassion/intraception for first-line managers, Head Nurses, in different performance categories? A similar ranking system was used to determine the match between EPPS high needs and PVQ operative values. EPPS needs within the 76-100 range were given a rank of 4, needs within the 51-75 range were given a rank of 3, needs within the 26-50 range were given a rank of 2, and needs
<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>12.0333</td>
<td>12.0333</td>
<td>.011*</td>
<td>.9158</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>29636.2667</td>
<td>1058.4381</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>29648.3000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant.*
### Table 18

**Analysis of Variance for Performance Rating and the Need for Deference**

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>213.3333</td>
<td>213.3333</td>
<td>.457*</td>
<td>.5045</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>13066.5333</td>
<td>466.6619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>13279.8667</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant.*
### TABLE 19

**ANALYSIS OF VARIANCE FOR PERFORMANCE RATING AND THE NEED FOR DOMINANCE**

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>240.8333</td>
<td>240.8333</td>
<td>1.233*</td>
<td>.2762</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>5468.5333</td>
<td>195.3048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>5709.3666</td>
<td>210.1393</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant.*
### TABLE 20

**ANALYSIS OF VARIANCE FOR PERFORMANCE RATING AND THE NEED FOR INTRACEPTION**

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees Of Freedom</th>
<th>Sum Of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>616.5333</td>
<td>616.5333</td>
<td>0.755*</td>
<td>0.3924</td>
</tr>
<tr>
<td>Within Groups</td>
<td>28</td>
<td>22879.3333</td>
<td>817.1190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>29</td>
<td>23495.8667</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant.*
within the 1-25 range were given a rank of 1. PVQ operative values were given a rank of 4, intended values were given a rank of 3, adopted values were given a rank of 2, and weak values were given a rank of 1. Matches between needs and values given the rank of 4 were the only combinations considered for answering this research question.

Pairing the seven values and seven needs resulted in a number of matches. Table 21 shows eight matches between the need for and value of achievement, one match between the need for and value of aggression, two matches between the need for and value of autonomy, two matches between the need for and value of change, three matches between the need for dominance and the value of influence, and three matches between the need for intraception and the value of compassion. Table 21 shows a total of eighteen matches between varied needs and values.

Table 21 shows that achievement had eight different matches. The Head Nurses for whom these values and needs were equally high in importance, had a mean job performance rating of 52.8, were 31.0 mean years of age, had a mean job tenure of 4.6 years, and included three RN's and five BSN's. All eight had a pragmatic primary mode of valuation. Also, four of the nurses for whom the
<table>
<thead>
<tr>
<th>Need: Value:</th>
<th>Achievement</th>
<th>Aggression Aggressiveness</th>
<th>Autonomy Autonomy</th>
<th>Change Change</th>
<th>Dominance Influence</th>
<th>Intraception Compassion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Matches</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mean Job Performance</td>
<td>52.8</td>
<td>59.0</td>
<td>49.0</td>
<td>49.0</td>
<td>55.7</td>
<td>55.0</td>
</tr>
<tr>
<td>Mean Age</td>
<td>31.0 Years</td>
<td>26.0 Years</td>
<td>34.0 Years</td>
<td>26.0 Years</td>
<td>26.7 Years</td>
<td>28.0 Years</td>
</tr>
<tr>
<td>RN/ADN</td>
<td>3 (37%)</td>
<td>1 (100%)</td>
<td>1 (50%)</td>
<td>-0-</td>
<td>2 (67%)</td>
<td>-0-</td>
</tr>
<tr>
<td>BSN/BA</td>
<td>5 (63%)</td>
<td>-0-</td>
<td>1 (50%)</td>
<td>2 (100%)</td>
<td>1 (33%)</td>
<td>3 (100%)</td>
</tr>
<tr>
<td>Job Tenure Mean</td>
<td>4.6 Years</td>
<td>2.0 Years</td>
<td>7.5 Years</td>
<td>3.3 Years</td>
<td>2.3 Years</td>
<td>2.0 Years</td>
</tr>
<tr>
<td>Primary Value Orientation</td>
<td>Pragmatic (100%)</td>
<td>Pragmatic (100%)</td>
<td>Pragmatic (100%)</td>
<td>Pragmatic (100%)</td>
<td>Pragmatic (100%)</td>
<td>Pragmatic (67%) Ethical/Moral (33%)</td>
</tr>
</tbody>
</table>
value and need for achievement were high selected this as their only match.

Aggression had only one match. This Head Nurse had another match with achievement. She was a 26 year old RN who was in her Head Nurse position for two years. Her performance rating was 59.0. Her primary value orientation was pragmatic. Her other operative values and high needs included achievement and dominance/influence.

Two Head Nurses selected autonomy as a high need and operative value. Both of these nurses also selected autonomy as their only match. Their primary mode of valuation was pragmatic. Their mean age was 34.0, one had an RN and the other had a BSN, both received a performance rating of 49.0, and had a job tenure mean of 7.5 years. One nurse had been in her position fourteen years and the other had been in her position one year.

Change received two matches. Both nurses whose operative values included change and expressed a high need for change, matched on achievement and one other, dissimilar need and value combination. Their mean performance rating was 53.5, both had a pragmatic primary mode of valuation, each had a BSN degree and were 26 years old. Their mean job tenure was 3.2 years.

The influence and dominance combinations had three matches. The three Head Nurses for whom these were
operative values and high needs, shared a pragmatic value orientation, were 26.7 mean years of age, two had a BSN degree and one had an RN and they had a mean job tenure of 2.3 years.

The compassion and intraception combination had three matches. Two of these Head Nurses had only this one match. All three of the nurses with high matches in this category had a BSN degree, their mean age was 28.0 and their mean job tenure was 4.5 years. Their mean performance rating was 55.0. Two had a pragmatic primary mode of valuation and one had an ethical/moral primary mode of valuation.

Table 21 shows that 27% of the Head Nurses were in the achievement category. Within this category, 63% of the Head Nurses had above-median performance ratings. The one Head Nurse in the aggression category was an RN graduate with a pragmatic primary value orientation. The two nurses in the autonomy category were both rated below the median but were the oldest and had the longest job tenure. In the change category both Head Nurses were rated above the median in performance. In the dominance/influence category both Head Nurses were rated above the median. The compassion/intraception category had two Head Nurses rated above the median and one rated below the median in job performance. Head Nurses rated
above the median had high needs and operative values for achievement, aggression, change, influence/dominance and compassion/intraception. Head Nurses rated below the median had high needs and operative values for achievement, autonomy, and compassion/intraception. Autonomy, change, and influence/dominance were the only needs and values segregated by performance rating.

**Discriminant Analysis**

Another procedure was undertaken to determine which factors included in the Head Nurses managerial profile made the greatest contribution to these performance ratings. To determine their relative contribution to the discriminant function, statistical analysis included consideration of the profile's major variables in addition to the many JDS and MSQ factors not treated separately in previous discussions. Table 22 lists the variables that are ranked in order of their relative contribution to the discriminant function.

Several aspects of the discriminant function deserve consideration. The mean discriminant function for Head Nurses with below-median performance was 2.53 and -2.52 for Head Nurses with above-median job performance. Each standardized coefficient represents the relative contribution of its associated variable to the function, when the sign is ignored. The sign denotes if the
TABLE 22

DISCRIMINANT ANALYSIS OF MAJOR VARIABLES IN ADDITION TO ALL MSQ AND JDS FACTORS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard Discriminant Coefficient</th>
<th>Unstandardized Discriminant Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>2.96354</td>
<td>5.68831</td>
</tr>
<tr>
<td>Job Tenure</td>
<td>2.30635</td>
<td>2.726340</td>
</tr>
<tr>
<td>JDS Growth Need Satisfaction</td>
<td>2.06129</td>
<td>2.343483</td>
</tr>
<tr>
<td>MSQ Ability Utilization</td>
<td>-2.02432</td>
<td>-2.393947</td>
</tr>
<tr>
<td>Years In Nursing</td>
<td>1.86248</td>
<td>2.413686</td>
</tr>
<tr>
<td>JDS Pay</td>
<td>-1.67463</td>
<td>-1.130874</td>
</tr>
<tr>
<td>EPPS Achievement</td>
<td>-1.58442</td>
<td>-1.067394</td>
</tr>
<tr>
<td>JDS Task Significance</td>
<td>-1.27365</td>
<td>-1.667599</td>
</tr>
<tr>
<td>JDS Meaningfulness of Work</td>
<td>-0.92806</td>
<td>-1.261489</td>
</tr>
<tr>
<td>MSQ Company Policy And Procedure</td>
<td>0.90412</td>
<td>0.258295</td>
</tr>
<tr>
<td>MSQ Variety</td>
<td>-0.84606</td>
<td>-0.215596</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>4.63038</td>
</tr>
</tbody>
</table>
variable is making a positive or negative contribution. The unstandardized coefficients were used to compute the discriminant score for an individual Head Nurse. A negative discriminant score indicates above-median performance. For instance, the higher a Head Nurse's education, the more likely she was to be rated below the median in job performance. Of course, other variables also contributed to the total discriminant.

Table 22 shows that different variables move Head Nurses toward different performance ratings. Several variables tend to move a Head Nurse toward a lower performance rating. These variables are education, job tenure, the JDS factor of growth need satisfaction, years in nursing, and the MSQ factor of company policies and procedures. Therefore, the more education, the longer the job tenure and years in nursing, the more likely a Head Nurse was to receive a lower rating. These determinations were corroborated throughout the data reported previously. For instance, Table 3 identified that the Head Nurses with more education and longer job tenure tended to be rated lower regardless of age or nursing division affiliation.

The variables that tended to move a Head Nurse toward above-median ratings were the MSQ factor of ability utilization, the JDS factor of pay, the EPPS need for achievement, the JDS factors of task significance and
meaningfulness of work, and the MSQ factor of variety. Thus, the higher the Head Nurses scored on these variables the more likely they were to be rated above the median. **Regression of Performance Ratings**

Table 23 shows which variables predict the actual Head Nurse's performance ratings. The multiple R for the equation = .80532. The significance of regression is $F_{23,6} = 7.0735$ (significant < .001). Because $R^2 = .64854$, the equation explained almost 65% of the variance in performance rating. The six variables listed in Table 23 are different from those variables in Table 22 which discriminated between the above-median and below-median performers. The $R^2$ change column shows how much variation each variable explained as it was added to the equation. Consequently, for positive coefficients, the higher the score the higher the performance rating. For negative coefficients, the higher the score the more it decreased performance ratings.

**Summary**

The data outlined in Chapter IV describe several distinctions between the two groups of performers with respect to their demographic characteristics, job reactions, values, and needs. A brief description of each group outlines a general profile for the below-median and above-median performers.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standardized Coefficient</th>
<th>Significance</th>
<th>R²</th>
<th>R² Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDS Dealing With Others</td>
<td>5.271</td>
<td>.577</td>
<td>.001</td>
<td>.22604</td>
<td>.22604</td>
</tr>
<tr>
<td>PVQ Influence</td>
<td>3.180</td>
<td>.350</td>
<td>.016</td>
<td>.39372</td>
<td>.16768</td>
</tr>
<tr>
<td>EPPS Autonomy</td>
<td>-.083</td>
<td>-.451</td>
<td>.003</td>
<td>.46881</td>
<td>.07510</td>
</tr>
<tr>
<td>PVQ Aggression</td>
<td>2.705</td>
<td>.357</td>
<td>.017</td>
<td>.54541</td>
<td>.07660</td>
</tr>
<tr>
<td>JDS General Satisfaction</td>
<td>-1.450</td>
<td>- .318</td>
<td>.033</td>
<td>.57667</td>
<td>.03126</td>
</tr>
<tr>
<td>JDS Job Security</td>
<td>1.254</td>
<td>.308</td>
<td>.041</td>
<td>.64854</td>
<td>.07187</td>
</tr>
<tr>
<td>Constant</td>
<td>10.497</td>
<td></td>
<td>.282</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The below-median performers had several distinguishing characteristics. They had 4.67 mean job tenure years, 9.68 mean years in nursing, 7.22 mean years at NMH, and their educational credentials were 14% RN/ADN, 72% BSN/BA, 14% MSN/MA. Other descriptors included 60% who found their jobs low in motivating potential; 51% experienced low job satisfaction; over 50% identified the operative values of skill, ability, high productivity, organizational efficiency, employees, my boss and managers; their managerial orientations were 73% pragmatic, 20% affective, and 7% ethical/moral; 93% expressed a high need for dominance, and 67% expressed a high need for achievement.

The above-median performers had 3.23 mean job tenure years, 9.2 mean years in nursing, 6.1 mean years at NMH, and their educational credentials were 60% BSN/BA and 40% RN/ADN. Other descriptors included 60% who experienced high motivation potential, 47% who experienced high job satisfaction, over 50% had operative values of skill, autonomy, achievement, organizational efficiency, high productivity, me, and managers; their managerial orientations were 73% pragmatic and 27% ethical/moral; 67% expressed a high need for achievement, and 87% expressed a high need for dominance.
Several characteristics distinguish these two groups. The lower-rated performers were in their jobs longer, spent more of their nursing years working at NMH and had more education. The lower-rated Head Nurses experienced less motivating potential but higher job satisfaction than their higher-rated colleagues. The operative values directing the majority of the lower-rated Head Nurses behavior included ability, employees, my boss, and managers, while the majority of higher-rated Head Nurses were directed by the operative values of autonomy, achievement, and me. The two groups are similar with respect to age, managerial orientation, and need structure.

Chapter V will review the study's limitations and research questions with respect to the findings. Data will be discussed in relation to its implications. Future research directions will also be proposed.
CHAPTER V

SUMMARY

Introduction

The purpose of this study was to outline a profile of first-line nursing managers, Head Nurses, with differing levels of job performance. Objectives related to the goal of describing a specific employee group were: to comprehensively review each Head Nurse's job performance with respect to job design reactions, experienced job satisfaction, personal work values, need structures, certain demographic characteristics, and to select a managerial population because of increasing interest in this important worker population who translates and transmits organizational goals through the workers who report to them.

All subjects who volunteered to participate in this study were Head Nurses at Northwestern Memorial Hospital (NMH). NMH is a comprehensive teaching medical center with university affiliation. Until 1981 NMH sponsored its own diploma school of nursing which offered its students the educational opportunity to become registered nurses and receive the RN Diploma. Since 1980 Northwestern University Medical School which shares a campus with NMH offered a Bachelors of Science in Nursing (BSN) degree and
presently offers a Masters of Science in Nursing (MSN) through its Programs in Nursing division.

The Head Nurse's managerial profiles were developed and based on several instruments that assessed aspects of their professional lives and personal lives. Included in the profile was the Job Diagnostic Survey (JDS) that provides a Motivating Potential Score (MPS) to identify job design reactions in addition to other internal factors affecting job reactions. The Minnesota Satisfaction Questionnaire (MSQ) was used to assess job satisfaction. The MSQ provides a general job satisfaction score reflective of a composite of other factors that can be considered separately. The literature recommends using these two instruments together (Ferratt, 1981).

The two remaining instruments reviewed values and needs, respectively, and were both included because their theoretical frameworks were based on theories of motivation. The Personal Values Questionnaire (PVQ) is a 66-item questionnaire that assesses personal work values in two ways. It provides a managerial orientation of pragmatic, affective, or ethical/moral, and ranks each of the value concepts as operative, intended, adopted, or weak values. This investigation used the managerial orientation and operative values, only. The Edwards Personal Preference Schedule (EPPS) measures the strength
of 20 manifest needs. Only seven of these needs, achievement, aggression, autonomy, change, deference, dominance, and intraception were correlated with the seven PVQ values of achievement, aggressiveness, autonomy, change, obedience, influence, and compassion to determine the similarities of responses.

The demographic information gathered for this study included age, education, years in nursing, years worked at Northwestern Memorial Hospital, and job tenure for Head Nurses at NMH. This information was used to form categories of responses to the four major variables and to further describe the Head Nurses in different performance categories.

Head Nurse's rated job performance was the aspect of this investigation that the profile was designed to describe. The Head Nurses at NMH are annually evaluated by the nurse to whom they directly report, usually a Nursing Supervisor or sometimes a Director of Nursing Service. Performance was determined through completion, by regular evaluators, of a modified variation of the Head Nurse's existing performance instrument. The existing form is 15 pages in length and extensively reviews the areas of unit management, staff management, and patient care management. The modified form, the Supervisor Rating Form (SRF), surveyed the same three areas as the regular
form by asking the same basic nine questions without additional subsections. SRF answers determined if a Head Nurse scored above or below the median with respect to job performance.

The design used to establish a profile of Head Nurses with either below-median or above-median job performance was the field study. The field study is exploratory in nature and offers the researcher an opportunity to view a situation as it exists as opposed to manipulating existing conditions to provide predicted responses. Therefore, realism and the latitude to pursue alternative directions suggested by the data recommend the field study (Kerlinger, 1973). This study included seven research questions that directed categorization and analysis of the data.

Chapter V is divided into three major sections, summary, discussion and recommendations. The first section reviews each of the seven research questions with respect to data findings, their implications, and limitations. The second section discusses the study's findings. The final section considers directions for future research.

Research Questions

The first research question asked: What are the Motivating Potential Scores as measured by the Job
diagnostic Survey for the first-line managers, Head Nurses, in different job performance categories? An MPS median was calculated to facilitate data analysis related to the performance median. Both performance groups included Head Nurses with either above-median MPS ratings indicating satisfaction with their job's design or below-median MPS ratings indicating dissatisfaction with their job's design. In the below-median performance category older Head Nurses with longer job tenure found their job's design more satisfying. In the above-median performance category satisfaction with the job's design decreased as job tenure increased. These data do not indicate the necessity for or appropriateness of a job redesign intervention to increase favorable responses to the existing job's design. An ANOVA statistic identified no significant difference between the two performance groups with respect to MPS ratings.

The second research question asked: What are the general job satisfaction scores as measured by the Minnesota Satisfaction Questionnaire for first-line managers, Head Nurses, in different performance categories? An MSQ median was calculated to facilitate data analysis related to the performance median. Both performance groups included Head Nurses with either above-median general job satisfaction indicating overall
favorable job responses or below-median general job satisfaction indicating overall unfavorable job responses. In the below-median performance category Head Nurses experienced higher job satisfaction as they became older and obtained more education. An ANOVA statistic identified that job satisfaction did not distinguish between the two groups of performers.

The third research question asked: What is the correlation between high Motivating Potential Scores (MPS) as measured by the Job Diagnostic Survey and high general job satisfaction scores as measured by the Minnesota Satisfaction Questionnaire for first-line managers, Head Nurses? The Pearson product-moment statistic was used to determine the correlation between MSQ scores and MPS ratings. The relationship showed a high positive correlation. These data indicate that Head Nurses who experienced job satisfaction also responded favorably to their job's design.

The fourth research question asked: What are the operative values as measured by the Personal Values Questionnaire for first-line managers, Head Nurses, in different job performance categories? Operative values were selected for consideration because of their potential to directly influence behavior. The major operative values Head Nurses in the above-median performance
category selected included skill, autonomy, achievement, organizational efficiency, high productivity, me, and managers. The major operative values for Head Nurses in the below-median performance category selected included skill, ability, high productivity, organizational efficiency, employees, my boss, and managers. Because the operative values for the Head Nurses in both performance categories were very similar, these data indicated that decision-making and problem-solving behaviors should not be remarkably dissimilar for the Head Nurses in either performance category.

The fifth research question asked: What are the operative values for first-line managers, Head Nurses with a pragmatic primary mode of valuation and first-line managers, Head Nurses, with an affective primary mode of valuation as measured by the Personal Values Questionnaire with respect to rated job performance? Operative values for the twenty-two pragmatic Head Nurses included ability, skill, ambition, achievement, high productivity, organizational efficiency, organizational growth, organizational stability, managers, co-workers, and me. Operative values for the three affective Head Nurses included job satisfaction, money, employees, and my company. The pragmatic manager's operative values emphasized personal characteristics related to success.
The affective manager's operative values emphasized work-life aspects related to pleasure. Different operative values directed the decision-making and problem-solving behaviors of these two groups of managers. Also, half of the pragmatic and all three of the affective managers were included in the below-median performance categories. Operative values for the five Head Nurses with an ethical/moral primary mode of valuation were not considered.

The sixth research question asked: What are the need levels for achievement, aggression, autonomy, change, deference, dominance and intraception as measured by the Edwards Personal Preference Schedule for first-line managers, Head Nurses, in different job performance categories? The seven needs were selected because of their similarity to seven PVQ concepts. Head Nurses in both the above-median and below-median performance categories had high needs for all needs but deference. The two groups had more similarities than differences with respect to need level. An ANOVA statistic identified that no needs distinguished the Head Nurses in the two performance groups from one another.

The seventh research question asked: What is the relationship between the needs for and values of achievement, aggressiveness, autonomy, change,
obedience/deference, influence/dominance,
compassion/intracception for first-line managers, Head
Nurses, in different job performance categories? Pairing
the values and needs resulted in eight matches for
achievement, one match for aggression, two matches for
autonomy, two matches for change, three matches for
influence/dominance, and three matches for
obedience/intracception. Autonomy, change and
influence/dominance were the only needs and values
separated by performance rating.

A discriminant function was used to analyze the
major variables of the Head Nurse's profile in addition to
the many JDS and MSQ factors not given consideration in
previous discussions with respect to how they contributed
to performance ratings. The variables that tended to move
a Head Nurse toward a lower performance rating were
education, job tenure, JDS growth need satisfaction, years
in nursing, and the MSQ factor of company policies and
procedures. The variables that tended to move a Head
Nurse toward a higher performance rating were the MSQ
factor of ability utilization, the JDS factor of pay, the
EPPS need for achievement, the JDS factors of task
significance and meaningfulness of work, and the MSQ
factor of variety. A regression of the performance
ratings identified that JDS dealing with others, PVQ
influence, EPPS autonomy, PVQ aggressiveness, JDS general satisfaction, JDS job security combined to explain almost 65% of the variance in performance ratings.

A general view of the Head Nurses in the two performance categories identified both similarities and differences. The higher-rated performers usually responded positively to the design of their jobs, experienced low job satisfaction, had pragmatic values orientations, had high needs for dominance and achievement, and had operative values for skill, autonomy, achievement, organizational efficiency, high productivity, me and managers. The lower-rated performers were likely to respond negatively to the design of their jobs, experienced low job satisfaction, had a pragmatic or affective value orientation, had high needs for dominance and achievement, and operative values for skill, ability, high productivity, organizational efficiency, employees, my boss, and managers. Likely predictors of performance ratings were education, years in nursing, and job tenure. As these factors increased, performance ratings were likely to decrease.

Limitations

The first limitation influencing the results of this study concerned the lack of control over organizational variables that could make an impact upon
reactions to job design and job satisfaction. Because no other organizational changes were being implemented at the time data were collected, scores on both instruments are assumed to represent current reactions.

A second limitation of this study concerned its sample. The NMH Head Nurses were most representative of those who selected to work at NMH as opposed to a comparable institution. NMH is an institution with organizational structures very similar to other urban, teaching medical centers in the Chicago area. Though the Head Nurse job description may vary from hospital to hospital, the generic definition of a Head Nurse as nursing's first-line manager is well understood within the profession (Barret et al., 1975).

A third limitation was this study's sample size. Though almost 70% of the NHM Head Nurse population volunteered to participate in this study the sample size was only 30. The intent of this study was to outline a profile of first-line nursing managers and generalization from this sample to other Head Nurse populations could create a major margin of error.

The last limitation considered to influence the outcome of this study regards the four major variables that comprised the profiles of differently-rated performers. The literature supports the notion that
values, needs, and job reactions influence motivation. However, other factors not included in the profile may also influence worker motivation. A related limitation relates to the instruments selected to measure these variables. The literature identified the JDS, MSQ, PVQ, and EPPS as the instruments of choice for measurement of these variables; however, the instruments themselves were limited by their theoretical frameworks and psychometric properties.

With respect to these limitations, this study does provide a profile of the Head Nurses who participated as subjects. The data identify some differences between the two groups of performers. Discussion of these findings follows.

DISCUSSION

Responses to Job Design

The motivating potential score (MPS) measured by the Job Diagnostic Survey (JDS) reflects a worker's responses to the five core job characteristics of skill variety, task identity, task significance, autonomy, and feedback. As salient aspects of a job's design, core job characteristics elicit either favorable or unfavorable responses depending upon the extent to which an employee perceives their presence in a job's design. A high MPS
reflects positive reactions to the existence of the core job characteristics in a job's design and a low MPS reflects negative reactions to the existence or lack of existence of the core job characteristics in a job's design.

Job design reactions are linked to job performance by the assumption that workers well suited for redesigned jobs will necessarily perform better (Hackman and Oldham, 1980). Job design reactions reflected in the MPS did not significantly distinguish the Head Nurses with respect to rated job performance. No causal relationship between job performance and job design reactions was identified.

Job tenure, however, did distinguish Head Nurses in the two performance categories with respect to MPS ratings. The lower-rated Head Nurses with longer job tenure had higher MPS ratings while the higher-rated Head Nurses with longer job tenure had lower MPS ratings. The higher-rated Head Nurses experienced less evidence of the core job characteristics as their job tenure increased and the lower-rated Head Nurses experienced increased evidence of the core job characteristic's presence as their job tenure increased (Hackman and Oldham, 1980). Higher-rated Head Nurses may experience decreased evidence of their job's core characteristics because they learn the
position's fundamental responsibilities quickly and desire the challenges posed by a redesigned job.

The relationship between MPS ratings and the Head Nurse's divisional assignments is a factor deserving consideration. Joiner et al. (1982) found that MPS means were the lowest for nurses working in psychiatry and the highest for nurses working in critical care. The critical care Head Nurses had an MPS mean of 225.5 and the psychiatry Head Nurses had an MPS mean of 188.2. Based on this investigation's findings, the critical care Head Nurses are an example of higher-rated performers whose MPS is predicted to decrease based on their high performance mean of 57.0 and their low job tenure mean of 1.7 years. These data indicate that this is a group of Head Nurses deserving consideration as possible candidates for job redesign intervention to maintain high MPS ratings and performance.

Additional statistical analysis showed that four separate JDS factors influenced performance ratings. Discriminant analysis identified that the JDS factors of pay, task significance, and meaningfulness of work contributed positively to performance ratings. The higher Head Nurses scored on these variables, the more likely they were to be rated above the median. Also, discriminant analysis identified that the JDS factor of
growth need satisfaction contributed negatively to performance ratings. The higher Head Nurses scored on this variable, the more likely they were to be rated below the median.

Factors identified through discriminant analysis as contributors to a specific performance category further describe and distinguish the two groups of Head Nurses. The inclusion of pay was not surprising because of its identification as a major work dissatisfier for nurses (Wandelt et al., 1981). However, as a hygiene factor not directly related to the work itself, pay should not contribute to performance motivation (Herzberg, 1966). Task significance is a core job characteristic related to the work itself and directly responsible for performance motivation (Hackman, 1977). The work's meaningfulness concerns employee's perceptions of their universal contribution to others through their job efforts (Hackman and Oldham, 1980). Head Nurses rating these three JDS factors very highly were more likely to be rated above the median. However, Head Nurses with high growth need satisfaction were more likely to be rated below the median implying that these nurses needs for growth and development were being met (Hackman and Oldham, 1980). These findings indicate that JDS pay, task significance, and meaningfulness of the work ratings can predict above-
median performance ratings and also describe Head Nurses who rate highly these aspects of their jobs. Growth need satisfaction ratings can predict below-median performance ratings and also describe Head Nurses who find this need being met in their jobs.

**Job Satisfaction**

The study of job satisfaction continues to generate interest because of the remaining speculation about job satisfaction's impact upon job performance. The investigation of job satisfaction among nurses offers the researcher a tradition rich in speculation that unfortunately provides few answers (Aiken et al., 1981; Brett, 1983; Ginzberg et al., 1982; Gordon, 1982; Imparato, 1973, Joiner et al., 1982; Katz, 1969; Levine, 1978; McCloskey, 1974; Munson and Heda, 1974; Reese et al., 1964; Slavitt, 1978; Wandelt et al., 1981; Weisman et al., 1981). The Head Nurses illustrate this point because the ANOVA statistic found that job satisfaction levels did not significantly distinguish those in either performance group from one another. Though no connection linking performance and job satisfaction was identified by the ANOVA statistic, comparison of the demographic characteristics of the Head Nurses in each category and discriminant analysis did identify some differences between the members in each performance category.
Job satisfaction was measured by the Minnesota satisfaction Questionnaire (MSQ) which yielded a general job satisfaction score for each Head Nurse. Calculation of the MSQ median established both above-median and below-median job satisfaction for Head Nurses in each of the two performance categories. In general, job satisfaction increased as age increased for the Head Nurses in both performance categories.

The MSQ also provides individual scores for its twenty factors. The three factors to which Head Nurses gave their lowest-satisfaction scores were compensation, company policies and practices, and advancement. These factors are job aspects external to the performance of their duties. Eliminating the problematic aspects of these factors may lessen dissatisfaction but not increase job satisfaction (Herzberg, 1966). Factors upon which Head Nurses consistently scored high were social service and moral values. These aspects of the work hold an intrinsic appeal that can meet higher-order needs (Maslow, 1970). The absence of these factors may also cause dissatisfaction because of their relationship to the perceived meaningfulness of the work (Hackman and Oldham, 1970).

Discriminant analysis identified three MSQ factors that contribute to performance ratings. MSQ company
policies and practices contributed negatively to performance ratings. The higher Head Nurses rated this factor the more likely they were to be rated below the median. This finding leads to the conclusion that those who found institutional policies disagreeable were consequently rated lower. The higher Head Nurses scored on the MSQ factors ability utilization and variety, similar to the core job characteristics, the more likely they were to be rated above the median. Those factors contributed positively to performance ratings.

Three conclusions regarding the connection between job satisfaction and job performance are suggested by these data. General job satisfaction levels did not clearly distinguish members of either performance category. However, the data also found that general job satisfaction levels were higher for older nurses. These two findings suggest neither the appropriateness of nor necessity for interventions designed to increase job satisfaction with the hope of positively affecting work performance. However, discriminant analysis findings recommend that job satisfaction factors most likely to influence an increase in performance ratings concern the work itself. If any interventions are to be undertaken, these data recommend that the work itself should be altered.
Values

Values influence managerial decision making through the selection of available behavioral options reflective of individual belief systems (Brown, 1976; Conner, 1975; England, 1975). The Head Nurses in the two different performance categories shared similar values. These data indicated that values did not separate the Head Nurses from one another with respect to performance. However, the Head Nurses' values require consideration from a managerial perspective and a professional nursing viewpoint.

Review of the Head Nurse's values offers the potential to predict some of their behavior. From a managerial perspective the Head Nurses in both performance categories valued organizational efficiency, high productivity and managers. These values predict that managerial decisions will reflect efforts to maintain and/or increase efficiency and productivity. From a nursing viewpoint both performance groups valued skill. This value predicts that nursing decisions will respect the skill level necessary to maintain high professional standards. These data on values suggest that the Head Nurses would not make decisions that had the potential to greatly sacrifice economic stability or compromise professional standards (England, 1975).
Distinctions between Head Nurses with different primary value orientations were well defined. Operative values for the pragmatic Head Nurses were clearly success-oriented. One interpretation of these data is that the pragmatic Head Nurses may be more effective as members of the budget committee while the affective Head Nurses may be more effective as members of social committees. Both committees support important aspects of organizational functioning.

Regression analysis identified that PVQ influence and aggressiveness combined to account for 25% of the variance in performance ratings. The higher Head Nurses scored on these two components the more likely they were to be given above-median performance ratings. Similar findings were reported in another study (McClelland and Boyatzis, 1982). These data indicate that influence and aggressiveness were subtly rewarded through performance evaluation for the Head Nurses.

The Head Nurses identified that factors reflective of their primary orientations and of high importance were operative values for them. Operative values are certain to influence the Head Nurse's behavior (England, 1975). However, identification of particular values does not imply that the Head Nurse's jobs offered expression for or acceptance of these values (Slavitt et al., 1978).
Needs

Need satisfaction motivates behavior in a manner similar to the way in which values direct behavior. Workers experience different need levels with respect to their jobs. For instance, workers motivated by a high need for aggression will probably display different job behaviors than workers motivated by a high need for deference. Need levels also influence job performance (Pennings, 1970; Porter et al., 1976).

Head Nurses in both performance categories had high need levels as measured by the Edwards Personal Preference Schedule (EPPS) for achievement, aggression, autonomy, change, dominance, and intraception. Other investigations report similar findings with respect to individual managerial need structure and performance (Hackman and Oldham, 1980; McClelland and Boyatzis, 1982; Porter, 1963). The fact that Head Nurses shared a need structure analogous to managers participating in other studies implies some generic similarities among workers in the managerial role.

Regression analysis identified that EPPS autonomy accounted for 8% of the variance in performance ratings. The higher Head Nurses scored on autonomy the more likely they were to receive below-median performance ratings. Discriminant function identified that the higher Head
Nurses scored on EPPS achievement the more likely they were to receive above-median performance ratings. The Head Nurses in the two performance groups were distinguished with respect to autonomy and achievement. Evaluators of the Head Nurses appeared to rate achievement much more highly than autonomy. Head Nurses with high autonomy needs may experience frustration in meeting that need in their jobs.

The identification of operative values and high needs is important for understanding the Head Nurse's motivational structure. Assessment of value structure and need level indicates the extent to which identified needs and values are operative for each Head Nurse. However, needs and values do not identify the extent to which the work setting enhances or inhibits the expression of particular values and needs. Head Nurses whose operative values and high needs were well matched were strongly motivated to behave in ways reflective of their needs and values. Head Nurses are not predicted to remain in jobs through which they are unable to express their operative values and meet their high needs.

Education and job tenure were two demographic characteristics that made major contributions to below-median performance ratings. Both variables were identified as salient throughout the data reporting. The
connection between higher levels of education and lower performance ratings is enigmatic with respect to the nursing profession's continuing emphasis upon the BSN degree as the level of entry to practice. However, the situation appears less phenomenal with respect to NMH's institutional loss of a diploma program within the past four years. Their own diploma-educated nurses who remained at the institution without pursuing further education continue to receive high performance ratings. The reason for rating other nurses lower appears to be related to this situation.

The link between increased job tenure and below-median performance lends itself to more speculation than consideration of the educational characteristic. However, it seems highly probable that the longer Head Nurses remain in their jobs the more likely they are to choose one of two responses to their situations. They may decide to become less conforming and more questioning or they may decide to become more complacent and less questioning. If they attain a higher educational level during their advancing job tenure, they are even more subject to lower ratings. Evaluators may respond negatively to the Head Nurse's increasing complacency or decreasing conformity and rate their performance less favorably.
RECOMMENDATIONS

Data Utilization

Consideration of research findings can lead to proposals for follow-up studies. This study of first-line managers answered seven research questions by formulating profiles of the Head Nurses in two different performance categories. This point in the research process recommends that decisions be made about how to utilize the data now and in the future.

Reactions to the study's findings readily lend themselves to categorization into three broad areas. These areas include making no changes, altering the Head Nurse role as it currently exists, or hiring different Head Nurses. The data could justify any of the three approaches based upon how the data are interpreted and the perspective from which it is viewed. However, before making changes based on the study's findings, the profile itself requires careful review because of its inability to identify statistically significant differences between the two performance groups. The existing data do identify the critical care nurses as a group deserving careful consideration because of the implications, discussed earlier, of their particular characteristics.
Future Research Directions

One major direction is to continue utilization of a profile format to increase knowledge and understanding of an identified worker population. Secondly, that population should be first-line managers or managers in general because of their importance to organizations. The profile used in this study is recommended for continued use at NMH with its Head Nurse population. To expand the existing data base it established, the profile can also be used at any other hospitals similar to NMH with any managerial population working in that hospital. As hospitals continue to contemplate the realities of imposed work force reductions, they must know their managerial staffs.

The implications for continued research based on the format developed and implemented in this study have relevance for: those interested in diagnosing a work climate, those interested in assessing worker perceptions before or after implementation of major organizational changes, those interested in assessing readiness for and reactions to management development programs, those interested in enhancing their knowledge of any identified worker population, those interested in following a group of workers longitudinally. These are general, suggested
directions that must be modified and specified to meet the needs of individualized situations.

Several specific research directions are also implied to further complement the data identified in this study. The existing profile can be expanded or diminished to include additional instruments or delete some presently included. Deletion or addition can reflect other related directions and interests. For instance, a future theoretical framework may not include values but may include assessment of managerial decision-making style. The profile's data can direct decisions for hiring practices, employee counseling, and training and development programs. Managers working in different departments can be compared with respect to the profile components. Managers can also be compared with respect to their demographic characteristics.

Identification of performance was a major component of this study. The structure of this study should interest any organization interested in the links between motivation and job performance. Future research endeavors may define and operationalize job performance the same as or different from this study's definition of work performance. Regardless of the similarities or differences of work performance definitions, the
performance variable is recommended for comparison with an organized process for identifying workers.

Summary

This study achieved its goal of outlining a profile of first-line nursing managers. The profile identified job reactions, values, and needs for Head Nurses with low and high job performance. The data gathered in this study described each group as more different than similar. The higher-rated performers usually responded positively to the design of their jobs, experienced low job satisfaction, had pragmatic values orientations, had high needs for dominance and achievement, and had operative values for skill, autonomy, achievement, organizational efficiency, high productivity, me and managers. The lower-rated performers generally responded negatively to the design of their jobs, experienced low job satisfaction, had a pragmatic or affective value orientation, had low needs for deference and high needs for dominance and achievement, and operative values for skill, ability, high productivity, organizational efficiency, employees, my boss, and managers. Likely predictors of performance ratings were education, years in nursing, and job tenure. As these factors increased, performance ratings were likely to decrease. The educational factor can be explained through possible lingering skepticism about
advanced educational credentials that has not caught up with the institution's change in educational alliance. Older nurses with more seniority may be viewed by those who evaluate them as less compliant with established standards and were penalized through performance ratings.
REFERENCES


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Research Committee
Office of Research & Sponsored Projects

Approval

TO: Missy Fleming

RE: RESEARCH PROJECT

"Establishing a Profile of First-Line Managers: Needs, Values, and Job Reactions for Head Nurses"

Your project was reviewed by the NU Research Committee and Office of Research and Sponsored Projects (NU-ORSP) on May 11, 1983. It was determined that the project met the requirements for it to be conducted involving Northwestern Memorial Hospital.

If human subjects are involved, this approval is final upon written notification of NU-ORSP of Institutional Review Board approval.

John P. Shiell, M.D.
Chair, Institutional Review Board
May 12, 1983

Missy Fleming
Office of Research

185
Missy Fleming
Nursing
Passavant 250
Chicago Campus

Re: Establishing a Profile of First-Line Managers' Needs, Values, and Job Reactions for Head Nurses

Dear Ms. Fleming:

At its May 6, 1983 meeting, the Institutional Review Board responsible for the review of research involving human subjects considered and approved your submission, as referenced above, for a one-year period ending May 31, 1984. This approval is given with the understanding that no changes may be made in the procedures to be followed nor the consent form(s) to be used until after such modifications have been submitted to the IRB for review and have been given approval.

In the event a subject is injured as a result of participation in this study, it is important that you immediately notify Mr. William Park of the Office of Risk Management at 492-5610. Where applicable, officials at the particular hospital must also be notified. Any unanticipated problems involving risks to human subjects or others must be reported to the IRB according to federal regulations.

One month prior to the expiration of this approval you will receive notification of the need for updated information to be used for the project's periodic review. Information concerning implementation and results to date will be required at that time.

Please do not hesitate to call if there are any questions.

Sincerely,

Joanne Richmond
Executive Secretary

HUMAN SUBJECTS REVIEW BY THE INSTITUTIONAL REVIEW BOARD APPLIES ONLY TO THE METHOD OF USING HUMAN SUBJECTS IN RESEARCH. THE INDIVIDUAL INSTITUTIONS (NU, NMH, RIC, VALMC, NMFF) MAY HAVE ADDITIONAL REQUIREMENTS FOR THE APPROVAL PROCESS OF PROTOCOLS. PLEASE CONTACT THE APPROPRIATE RESEARCH OFFICE BEFORE BEGINNING YOUR RESEARCH.
Name of Investigator: Missy Fleming

Name of Sponsor (if different): Dr. Marilyn Susman

Title of Project: Establishing a Profile of First-Line Managers:

Needs, Values, and Job Reactions for Head Nurses

The Institutional Review Board for the Protection of Human Subjects, Non-Medical Campuses has reviewed your research proposal involving human subjects.

Review Date: 9-22-83

☐ The project as described has been approved by the IRB.

☐ The project is approved conditionally. Research may begin as soon as a letter has been sent to the IRB indicating that the researcher will comply with the conditions specified below.

☐ The project cannot be approved as described. However, the IRB will give approval if written agreement is given the IRB that the conditions indicated below will be met.

☐ The project cannot be approved as described. The risks to the rights and welfare of the human participants which are inherent in this project are not sufficiently safeguarded and/or are not deemed justified given the potential outcome of this project.

Remarks:

Further details of this review may be obtained by contacting the Chairperson of the IRB.

Thank you for your cooperation in this review process.

Sincerely,

David T. Czar, Ph.D.
Chairperson, IRB
Job Diagnostic Survey

On the following pages you will find several different kinds of questions about your job. Specific instructions are given at the start of each section. Please read them carefully. It should take no more than 25 minutes to complete the entire questionnaire. Please move through it quickly.

The questions are designed to obtain your perceptions of your job and your reactions to it.

There are no "trick" questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible.

Thank you for your cooperation.
Section 1

This part of the questionnaire asks you to describe your job, as objectively as you can.

Please do not use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later. Instead, try to make your descriptions as accurate and as objective as you possibly can.

A sample question is given below.

A. To what extent does your job require you to work with mechanical equipment?

1---------2---------3---------4---------5---------6---------7
Very little; the job requires almost no contact with mechanical equipment of any kind. Moderately, the job requires almost constant work with mechanical equipment. Very much; the job requires almost constant work with mechanical equipment.

You are to circle the number which is the most accurate description of your job.

If, for example, your job requires you to work with mechanical equipment a good deal of the time - but also requires some paperwork - you might circle the number six, as was done in the example above.

If you do not understand these instructions, please ask for assistance. If you do understand them, begin now.
1. To what extent does your job require you to work closely with other people (either "clients," or people in related jobs in your own organization)?

1--------2--------3--------4--------5--------6--------7
Very little; dealing...

2. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

1--------2--------3--------4--------5--------6--------7
Very little; the job gives me almost no personal "say" about how and when the work is done. Moderate autonomy; many things are standardized and not under my control, but I can make some decisions about the work. Very much; the job gives me almost complete responsibility for deciding how and when the work is done.

3. To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

1--------2--------3--------4--------5--------6--------7
My job is only a tiny part of the overall piece of work; the results of my activities cannot be seen in the final product or service. My job is a moderate-sized "chunk" of the overall piece of work; my own contribution can be seen in the final outcome. My job involves doing the whole piece of work, from start to finish; the results of my activities are easily seen in the final product or service.

4. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

1--------2--------3--------4--------5--------6--------7
Very little; the job requires me to do the same routine things over and over again. Moderate variety. Very much; the job requires me to do many different things, using a number of different skills and talents.
5. In general how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

<table>
<thead>
<tr>
<th>Not very significant</th>
<th>Moderately significant</th>
<th>Highly significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>the outcomes of my work are not likely to have important effects on other people.</td>
<td>the outcomes of my work can affect other people in very important ways.</td>
<td></td>
</tr>
</tbody>
</table>

6. To what extent do managers or co-workers let you know how well you are doing on your job?

<table>
<thead>
<tr>
<th>Very little; people almost never let me know how well I am doing.</th>
<th>Moderately; people may occasionally give me &quot;feedback&quot; about how well I am doing.</th>
<th>Very much; managers or co-workers provide almost constant &quot;feedback.&quot;</th>
</tr>
</thead>
</table>

7. To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing — aside from any "feedback" co-workers or supervisors may provide?

<table>
<thead>
<tr>
<th>Very little; the job itself is set up so I could work forever without finding out how well I am doing.</th>
<th>Moderately; the job provides &quot;feedback&quot; to me; sometimes it does not.</th>
<th>Very much; the job is set up so that I get almost constant &quot;feedback&quot; as I work about how well I am doing.</th>
</tr>
</thead>
</table>
Listed below are a number of statements which could be used to describe a job.

You are to indicate whether each statement is an accurate or an inaccurate description of your job.

Once again, please try to be as objective as you can in deciding how accurately each statement describes your job - regardless of whether you like or dislike your job.

Write a number in the blank beside each statement, based on the following scale:

<table>
<thead>
<tr>
<th>How accurate is the statement in describing your job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Inaccurate</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
</tbody>
</table>

1. The job requires me to use a number of complex or high-level skills.
2. The job requires a lot of cooperative work with other people.
3. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.
4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.
5. The job is quite simple and repetitive.
6. The job can be done adequately by a person working alone - without talking or checking with other people.
7. The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.
8. This job is one where a lot of other people can be affected by how well the work gets done.
9. The job denies me any chance to use my personal initiative or judgment in carrying out the work.
10. Supervisors often let me know how well they think I am performing the job.
11. The job provides me the chance to completely finish the pieces-of-work I begin.
12. The job itself provides very few clues about whether or not I am performing well.
13. The job gives me considerable opportunity for independence and freedom in how I do the work.
14. The job itself is not very significant or important in the broader scheme of things.
Now please indicate how you personally feel about your job.

Each of the statements below is something that a person might say about his or her job. You are to indicate your own, personal feelings about your job by marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

<table>
<thead>
<tr>
<th>How much do you agree with the statement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Disagree Strongly</td>
</tr>
</tbody>
</table>

1. It's not hard, on this job, for me to care very much about whether or not the work gets done right.

2. My opinion of myself goes up when I do this job well.

3. Generally speaking, I am very satisfied with this job.

4. Most of the things I have to do on this job seem useless or trivial.

5. I usually know whether or not my work is satisfactory on this job.

6. I feel a great sense of personal satisfaction when I do this job well.

7. The work I do on this job is very meaningful to me.

8. I feel a very high degree of personal responsibility for the work I do on this job.

9. I frequently think of quitting this job.

10. I feel bad and unhappy when I discover that I have performed poorly on this job.

11. I often have trouble figuring out whether I'm doing well or poorly on this job.

12. I feel I should personally take the credit or blame for the results of my work on this job.

13. I am generally satisfied with the kind of work I do in this job.

14. My own feelings are not affected much one way or the other by how well I do on this job.

15. Whether or not this job gets done right is clearly my responsibility.
Section 4

Now please indicate how satisfied you are with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

How satisfied are you with this aspect of your job?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extremely Dissatisfied</td>
<td>Slightly Dissatisfied</td>
<td>Neutral</td>
<td>Slightly Satisfied</td>
<td>Satisfied</td>
<td>Extremely Satisfied</td>
<td></td>
</tr>
</tbody>
</table>

1. The amount of job security I have.
2. The amount of pay and fringe benefits I receive.
3. The amount of personal growth and development I get in doing my job.
4. The people I talk to and work with on my job.
5. The degree of respect and fair treatment I receive from my boss.
6. The feeling of worthwhile accomplishment I get from doing my job.
7. The chance to get to know other people while on the job.
8. The amount of support and guidance I receive from my supervisor.
9. The degree to which I am fairly paid for what I contribute to this organization.
10. The amount of independent thought and action I can exercise in my job.
11. How secure things look for me in the future in this organization.
12. The chance to help other people while at work.
13. The amount of challenge in my job.
14. The overall quality of the supervision I receive in my work.
Section 5

Now please think of the other people in your organization who hold the same job you do. If no one has exactly the same job as you, think of the job which is most similar to yours.

Please think about how accurately each of the statements describes the feelings of those people about the job.

It is quite all right if your answers here are different from when you described your own reactions to the job. Often different people feel quite differently about the same job.

Once again, write a number in the blank for each statement, based on this scale:

How much do you agree with the statement?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disagree</td>
<td>Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>Strongly</td>
<td>Slightly</td>
<td>Slightly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Most people on this job feel a great sense of personal satisfaction when they do the job well.
2. Most people on this job are very satisfied with the job.
3. Most people on this job feel that the work is useless or trivial.
4. Most people on this job feel a great deal of personal responsibility for the work they do.
5. Most people on this job have a pretty good idea of how well they are performing their work.
6. Most people on this job find the work very meaningful.
7. Most people on this job feel that whether or not the job gets done right is clearly their own responsibility.
8. People on this job often think of quitting.
9. Most people on this job feel bad or unhappy when they find that they have performed the work poorly.
10. Most people on this job have trouble figuring out whether they are doing a good or a bad job.
Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. We are interested in learning how much you personally would like to have each one present in your job.

Using the scale below, please indicate the degree to which you would like to have each characteristic present in your job.

**NOTE:** The numbers on this scale are different from those used in previous scales.

<table>
<thead>
<tr>
<th></th>
<th>Would like</th>
<th>Would like</th>
<th>Would like</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>having this only</td>
<td>having this</td>
<td>having this</td>
</tr>
<tr>
<td>5</td>
<td>a moderate amount</td>
<td>very much</td>
<td>extremely</td>
</tr>
<tr>
<td>6</td>
<td>(or less)</td>
<td>much</td>
<td></td>
</tr>
</tbody>
</table>

1. High respect and fair treatment from my supervisor.
2. Stimulating and challenging work.
3. Chances to exercise independent thought and action in my job.
4. Great job security.
5. Very friendly co-workers.
6. Opportunities to learn new things from my work.
7. High salary and good fringe benefits.
8. Opportunities to be creative and imaginative in my work.
9. Quick promotions.
10. Opportunities for personal growth and development in my job.
11. A sense of worthwhile accomplishment in my work.
Section 7

People differ in the kinds of jobs they would most like to hold. The questions in this section give you a chance to say just what it is about a job that is most important to you.

For each question, two different kinds of jobs are briefly described. You are to indicate which of the jobs you personally would prefer — if you had to make a choice between them.

In answering each question, assume that everything else about the job is the same. Pay attention only to the characteristics actually listed.

Two examples are given below.

**JOB A**

A job requiring work with mechanical equipment most of the day.

If you like working with people and working with equipment equally well, you would circle the number 3, as has been done in the example.

Here is another example. This one asks for a harder choice — between two jobs which both have some undesirable features.

**JOB A**

A job requiring you to expose yourself to considerable physical danger.

If you would slightly prefer risking physical danger to working far from your home, you would circle number 2, as has been done in the example.

**JOB B**

A job located 200 miles from your home and family.
JOB A

1. A job where the pay is very good.

2. A job where you are often required to make important decisions.

3. A job in which greater responsibility is given to those who do the best work.

4. A job in an organization which is in financial trouble - and might have to close down within the year.

5. A very routine job.

6. A job with a supervisor who is often very critical of you and your work in front of other people.

JOB B

A job where there is considerable opportunity to be creative and innovative.

A job with many pleasant people to work with.

A job in which greater responsibility is given to loyal employees who have the most seniority.

A job in which you are not allowed to have any say whatever in how your work is scheduled, or in the procedures to be used in carrying it out.

A job where your co-workers are not very friendly.

A job which prevents you from using a number of skills that you worked hard to develop.
<table>
<thead>
<tr>
<th>JOB A</th>
<th>JOB B</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. A job with a supervisor who respects you and treats you fairly.</td>
<td>A job which provides constant opportunities for you to learn new and interesting things.</td>
</tr>
<tr>
<td>8. A job where there is a real chance you could be laid off.</td>
<td>A job with very little chance to do challenging work.</td>
</tr>
<tr>
<td>9. A job in which there is a real chance for you to develop new skills and advance in the organization.</td>
<td>A job which provides lots of vacation time and an excellent fringe benefit package.</td>
</tr>
<tr>
<td>10. A job with little freedom and independence to do your work in the way you think best.</td>
<td>A job where the working conditions are poor.</td>
</tr>
<tr>
<td>11. A job with very satisfying team-work.</td>
<td>A job which allows you to use your skills and abilities to the fullest extent.</td>
</tr>
<tr>
<td>12. A job which offers little or no challenge.</td>
<td>A job which requires you to be completely isolated from co-workers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Slightly</th>
<th>Neutral</th>
<th>Slightly</th>
<th>Strongly</th>
</tr>
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<tbody>
<tr>
<td>Prefer A</td>
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<td></td>
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<table>
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<tr>
<th>Strongly</th>
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<th>Neutral</th>
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<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer A</td>
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<td></td>
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</tr>
</tbody>
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<table>
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<tr>
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<th>Slightly</th>
<th>Neutral</th>
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<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer A</td>
<td>Prefer A</td>
<td></td>
<td>Prefer B</td>
<td>Prefer B</td>
</tr>
</tbody>
</table>
minnesota
satisfaction questionnaire

1967 Revision

Vocational Psychology Research
UNIVERSITY OF MINNESOTA

© Copyright, 1967
Confidential
Your answers to the questions and all other information you give us will be held in strictest confidence.

Name__________________________________________Today's Date____________________ 19__

1. Check one: □ Male □ Female

2. When were you born?________________ 19__

3. Circle the number of years of schooling you completed:

   4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
   Grade School High School College Graduate or Professional School

4. What is your present job called?______________________________________________________

______________________________________________________

5. What do you do on your present job?_________________________________________________

______________________________________________________

6. How long have you been on your present job?_________years ___________months

7. What would you call your occupation, your usual line of work?__________________________

______________________________________________________

8. How long have you been in this line of work?_________years ___________months
minnesota satisfaction questionnaire

Directions

The purpose of this questionnaire is to give you a chance to tell how you feel about your present job, what things you are satisfied with and what things you are not satisfied with.

On the basis of your answers and those of people like you, we hope to get a better understanding of the things people like and dislike about their jobs.

On the following pages you will find statements about certain aspects of your present job.

- Read each statement carefully.
- Decide how you feel about the aspect of your job described by the statement.
  - Circle 1 if you are not satisfied (if that aspect is much poorer than you would like it to be).
  - Circle 2 if you are only slightly satisfied (if that aspect is not quite what you would like it to be).
  - Circle 3 if you are satisfied (if that aspect is what you would like it to be).
  - Circle 4 if you are very satisfied (if that aspect is even better than you expected it to be).
  - Circle 5 if you are extremely satisfied (if that aspect is much better than you hoped it could be).
- Be sure to keep the statement in mind when deciding how you feel about that aspect of your job.
- Do this for all statements. Answer every item.
- Do not turn back to previous statements.

Be frank. Give a true picture of your feelings about your present job.
Ask yourself: How satisfied am I with this aspect of my job?

1 means I am not satisfied (this aspect of my job is much poorer than I would like it to be).
2 means I am only slightly satisfied (this aspect of my job is not quite what I would like it to be).
3 means I am satisfied (this aspect of my job is what I would like it to be).
4 means I am very satisfied (this aspect of my job is even better than I expected it to be).
5 means I am extremely satisfied (this aspect of my job is much better than I hoped it could be).

<table>
<thead>
<tr>
<th>On my present job, this is how I feel about . . .</th>
<th>For each statement circle a number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The chance to be of service to others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. The chance to try out some of my own ideas.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Being able to do the job without feeling it is morally wrong.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. The chance to work by myself.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. The variety in my work.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. The chance to have other workers look to me for direction.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. The chance to do the kind of work that I do best.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. The social position in the community that goes with the job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. The policies and practices toward employees of this company.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. The way my supervisor and I understand each other.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. My job security.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. The amount of pay for the work I do.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. The working conditions (heating, lighting, ventilation, etc.) on this job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14. The opportunities for advancement on this job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. The technical &quot;know-how&quot; of my supervisor.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>16. The spirit of cooperation among my co-workers.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>17. The chance to be responsible for planning my work.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18. The way I am noticed when I do a good job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19. Being able to see the results of the work I do.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>20. The chance to be active much of the time.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>21. The chance to be of service to people.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>22. The chance to do new and original things on my own.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>23. Being able to do things that don't go against my religious beliefs.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>24. The chance to work alone on the job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>25. The chance to do different things from time to time.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
Ask yourself: How satisfied am I with this aspect of my job?

1 means I am not satisfied (this aspect of my job is much poorer than I would like it to be).

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5 means I am extremely satisfied (this aspect of my job is much better than I hoped it could be).

---

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

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. The chance to tell other workers how to do things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. The chance to do work that is well suited to my abilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. The chance to be &quot;somebody&quot; in the community.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Company policies and the way in which they are administered.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. The way my boss handles his men.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. The way my job provides for a secure future.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>32. The chance to make as much money as my friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>33. The physical surroundings where I work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. The chances of getting ahead on this job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. The competence of my supervisor in making decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. The chance to develop close friendships with my co-workers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. The chance to make decisions on my own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. The way I get full credit for the work I do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Being able to take pride in a job well done.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Being able to do something much of the time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. The chance to help people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. The chance to try something different.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Being able to do things that don't go against my conscience.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. The chance to be alone on the job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. The routine in my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. The chance to supervise other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. The chance to make use of my best abilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. The chance to &quot;rub elbows&quot; with important people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. The way employees are informed about company policies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. The way my boss backs his men up (with top management).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5
Ask yourself: How satisfied am I with this aspect of my job?

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<table>
<thead>
<tr>
<th>On my present job, this is how I feel about . . .</th>
<th>For each statement circle a number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>51. The way my job provides for steady employment.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>52. How my pay compares with that for similar jobs in other companies.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>53. The pleasantness of the working conditions.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>54. The way promotions are given out on this job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>55. The way my boss delegates work to others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>56. The friendliness of my co-workers.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>57. The chance to be responsible for the work of others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>58. The recognition I get for the work I do.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>59. Being able to do something worthwhile.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>60. Being able to stay busy.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>61. The chance to do things for other people.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>62. The chance to develop new and better ways to do the job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>63. The chance to do things that don’t harm other people.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>64. The chance to work independently of others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>65. The chance to do something different every day.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>66. The chance to tell people what to do.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>67. The chance to do something that makes use of my abilities.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>68. The chance to be important in the eyes of others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>69. The way company policies are put into practice.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>70. The way my boss takes care of complaints brought to him by his men.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>71. How steady my job is.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>72. My pay and the amount of work I do.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>73. The physical working conditions of the job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>74. The chances for advancement on this job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>75. The way my boss provides help on hard problems.</td>
<td>1 2 3 4 5</td>
</tr>
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On my present job, this is how I feel about . . .

76. The way my co-workers are easy to make friends with.  
77. The freedom to use my own judgment.  
78. The way they usually tell me when I do my job well.  
79. The chance to do my best at all times.  
80. The chance to be "on the go" all the time.  
81. The chance to be of some small service to other people.  
82. The chance to try my own methods of doing the job.  
83. The chance to do the job without feeling I am cheating anyone.  
84. The chance to work away from others.  
85. The chance to do many different things on the job.  
86. The chance to tell others what to do.  
87. The chance to make use of my abilities and skills.  
88. The chance to have a definite place in the community.  
89. The way the company treats its employees.  
90. The personal relationship between my boss and his men.  
91. The way layoffs and transfers are avoided in my job.  
92. How my pay compares with that of other workers.  
93. The working conditions.  
94. My chances for advancement.  
95. The way my boss trains his men.  
96. The way my co-workers get along with each other.  
97. The responsibility of my job.  
98. The praise I get for doing a good job.  
99. The feeling of accomplishment I get from the job.  
100. Being able to keep busy all the time.

For each statement circle a number.

1 2 3 4 5
Personal Values Questionnaire

INDUSTRIAL RELATIONS CENTER
UNIVERSITY OF MINNESOTA
Personal Values Questionnaire

This questionnaire is part of a research study of personal values. The aim of the study is to find out how individuals look at a wide range of topics. These topics are about people, groups of people, personal goals, organizational goals and general ideas.

You will be asked to judge the degree to which each topic is: (1) important, (2) pleasant, (3) right, and (4) successful. In completing this questionnaire, please make your judgments on the basis of what these topics mean to you as an individual.

Under no circumstances will your individual responses be made available to anyone except the research workers. The data we are attempting to gather are for use only in our research project on personal values.

In advance we wish to thank you for your participation in this study. It is through cooperation in studies such as this that we all advance our understanding of human behavior.
Instructions

Rate how important a topic is to you by placing an "X" in the appropriate box: the left box signifies high importance; the middle box, average importance; and the right box, low importance.

Then specify which of the three descriptions (successful, pleasant, right) best indicates the meaning of the topic to you; indicate your choice by placing the number "1" on the line next to it. Then indicate which description least indicates the topic's meaning to you by writing the number "3" in the space provided. Finally, write the number "2" next to the remaining description. Complete all topics in this manner and check to see that the three descriptions for each topic have been ranked in the manner instructed.

Examples

As an example, take the topic PATRIOTISM. If you felt that it is of average importance, you would make a check mark in the middle box as indicated. If you felt that of the three descriptions (pleasant, right, and successful) "right" best indicates what the topic means to you, you would write the number "1" next to "right". If the description "successful" least indicates what the topic means to you, then you would write the number "3" next to "successful", as shown in the sample below. Then you would place the number "2" next to the remaining description, in this case "pleasant".

For some topics you may feel that none of the descriptions apply. For example, you may feel that for the topic DISHONESTY, neither "pleasant", "right" nor "successful" indicates the meaning to you. If you have this trouble, you may begin by deciding which description least indicates the topic's meaning to you. For example, for the topic DISHONESTY if you felt that "right" least indicates the topic's meaning to you, you would write the number "3" next to "right", and so on for the remaining descriptions as shown in the sample.

<table>
<thead>
<tr>
<th>Patriotism</th>
<th>Dishonesty</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Importance</td>
<td>Importance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patriotic</th>
<th>Dishonesty</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Importance</td>
<td>Importance</td>
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</table>

<table>
<thead>
<tr>
<th>Ambition</th>
<th>Ability</th>
<th>Obedience</th>
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<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Imp.</td>
<td>Imp.</td>
<td>Imp.</td>
</tr>
<tr>
<td>1 right</td>
<td>2 pleasant</td>
<td>1 right</td>
</tr>
<tr>
<td>2 pleasant</td>
<td>3 right</td>
<td>3 successful</td>
</tr>
<tr>
<td>3 successful</td>
<td>1 successful</td>
<td>1 successful</td>
</tr>
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</table>
### Personal Goals of Individuals

<table>
<thead>
<tr>
<th>Leisure</th>
<th>Dignity</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Imp.</td>
<td>Low Imp.</td>
<td>High Imp.</td>
</tr>
<tr>
<td>right</td>
<td>right</td>
<td>right</td>
</tr>
<tr>
<td>pleasant</td>
<td>pleasant</td>
<td>pleasant</td>
</tr>
<tr>
<td>successful</td>
<td>successful</td>
<td>successful</td>
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</table>

<table>
<thead>
<tr>
<th>Autonomy</th>
<th>Money</th>
<th>Individuality</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Imp.</td>
<td>Low Imp.</td>
<td>High Imp.</td>
</tr>
<tr>
<td>right</td>
<td>right</td>
<td>right</td>
</tr>
<tr>
<td>pleasant</td>
<td>pleasant</td>
<td>pleasant</td>
</tr>
<tr>
<td>successful</td>
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</table>

<table>
<thead>
<tr>
<th>Job Satisfaction</th>
<th>Influence</th>
<th>Security</th>
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</thead>
<tbody>
<tr>
<td>High Imp.</td>
<td>Low Imp.</td>
<td>High Imp.</td>
</tr>
<tr>
<td>right</td>
<td>right</td>
<td>right</td>
</tr>
<tr>
<td>pleasant</td>
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<td>pleasant</td>
</tr>
<tr>
<td>successful</td>
<td>successful</td>
<td>successful</td>
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</table>

<table>
<thead>
<tr>
<th>Power</th>
<th>Creativity</th>
<th>Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Imp.</td>
<td>Low Imp.</td>
<td>High Imp.</td>
</tr>
<tr>
<td>right</td>
<td>right</td>
<td>right</td>
</tr>
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### Goals of Business Organizations

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Edwards Personal Preference Schedule
Allen L. Edwards, University of Washington

DIRECTIONS

This schedule consists of a number of pairs of statements about things that you may or may not like; about ways in which you may or may not feel. Look at the example below.

A I like to talk about myself to others.
B I like to work toward some goal that I have set for myself.

Which of these two statements is more characteristic of what you like? If you like “talking about yourself to others” more than you like “working toward some goal that you have set for yourself,” then you should choose A over B. If you like “working toward some goal that you have set for yourself” more than you like “talking about yourself to others,” then you should choose B over A.

You may like both A and B. In this case, you would have to choose between the two and you should choose the one that you like better. If you dislike both A and B, then you should choose the one that you dislike less.

Some of the pairs of statements in the schedule have to do with your likes, such as A and B above. Other pairs of statements have to do with how you feel. Look at the example below.

A I feel depressed when I fail at something.
B I feel nervous when giving a talk before a group.

Which of these two statements is more characteristic of how you feel? If “being depressed when you fail at something” is more characteristic of you than “being nervous when giving a talk before a group,” then you should choose A over B. If B is more characteristic of you than A, then you should choose B over A.

If both statements describe how you feel, then you should choose the one which you think is more characteristic. If neither statement accurately describes how you feel, then you should choose the one which you consider to be less inaccurate.

Your choices, in each instance, should be in terms of what you like and how you feel at the present time, and not in terms of what you think you should like or how you think you should feel. This is not a test. There are no right or wrong answers. Your choices should be a description of your own personal likes and feelings. Make a choice for every pair of statements; do not skip any.

The pairs of statements on the following pages are similar to the examples given above. Read each pair of statements and pick out the one statement that better describes what you like or how you feel. Make no marks in the booklet. On the separate answer sheet are numbers corresponding to the numbers of the pairs of statements. Check to be sure you are marking for the same item number as the item you are reading in the booklet.

If your answer sheet is printed in BLACK ink:
For each numbered item draw a circle around the A or B to indicate the statement you have chosen.

If your answer sheet is printed in OTHER THAN BLACK ink:
For each numbered item fill in the space for A or B as shown in the Directions on the answer sheet.

Do not turn this page until the examiner tells you to start.
1 A I like to help my friends when they are in trouble.
   B I like to do my very best in whatever I undertake.

2 A I like to find out what great men and women have thought about various problems in which I am interested.
   B I would like to accomplish something of great significance.

3 A Any woman work that I do I like to have precise, neat, and well organized.
   B I would like to be a recognized authority in some job, profession, or field of specialization.

4 A I like to tell amusing stories and jokes at parties.
   B I would like to write a great novel or play.

5 A I like to be able to come and go as I want to.
   B I like to be able to say that I have done a difficult job well.

6 A I like to solve puzzles and problems that other people have difficulty with.
   B I like to follow instructions and to do what is expected of me.

7 A I like to experience novelty and change in my daily routine.
   B I like to tell my superiors that they have done a good job on something, when I think they have.

8 A I like to plan and organize the details of any work that I have to undertake.
   B I like to follow instructions and to do what is expected of me.

9 A I like people to notice and to comment upon my appearance when I am out in public.
   B I like to read about the lives of great men and women.

10 A I like to avoid situations where I am expected to do things in a conventional way.
    B I like to read about the lives of great men and women.

11 A I would like to be a recognized authority in some job, profession, or field of specialization.
    B I like to have my work organized and planned before beginning it.

12 A I like to find out what great men and women have thought about various problems in which I am interested.
    B If I have to take a trip, I like to have things planned in advance.

13 A I like to finish any job or task that I begin.
    B I like to keep my things neat and orderly on my desk or workspace.

14 A I like to tell other people about adventures and strange things that have happened to me.
    B I like to have my meals organized and a definite time set aside for eating.

15 A I like to be independent of others in deciding what I want to do.
    B I like to keep my things neat and orderly on my desk or workspace.

16 A I like to be able to do things better than other people can.
    B I like to tell amusing stories and jokes at parties.

17 A I like to conform to custom and to avoid doing things that people I respect might consider unconventional.
    B I like to talk about my achievements.

18 A I like to have my life so arranged that it runs smoothly and without much change in my plans.
    B I like to tell other people about adventures and strange things that have happened to me.

19 A I like to read books and plays in which sex plays a major part.
    B I like to be the center of attention in a group.

20 A I like to criticize people who are in a position of authority.
    B I like to use words which other people often do not know the meaning of.

21 A I like to accomplish tasks that others recognize as requiring skill and effort.
    B I like to be able to come and go as I want to.

22 A I like to praise someone I admire.
    B I like to feel free to do what I want to do.

23 A I like to keep my letters, bills, and other papers neatly arranged and filed according to some system.
    B I like to be independent of others in deciding what I want to do.

24 A I like to ask questions which I know no one will be able to answer.
    B I like to criticize people who are in a position of authority.

25 A I get as angry that I feel like throwing and breaking things.
    B I like to avoid responsibilities and obligations.

26 A I like to be successful in things undertaken.
    B I like to form new friendships.

27 A I like to follow instructions and to do what is expected of me.
    B I like to have strong attachments with my friends.

28 A Any written work that I do I like to have precise, neat, and well organized.
    B I like to make as many friends as I can.

29 A I like to tell amusing stories and jokes at parties.
    B I like to write letters to my friends.

30 A I like to be able to come and go as I want to.
    B I like to share things with my friends.

31 A I like to solve puzzles and problems that other people have difficulty with.
    B I like to judge people by why they do something—not by what they actually do.

32 A I like to accept the leadership of people I admire.
    B I like to understand how my friends feel about various problems they have to face.

33 A I like to have my meals organized and a definite time set aside for eating.
    B I like to study and to analyze the behavior of others.
34 A I like to say things that are regarded as witty and clever by other people.
B I like to put myself in someone else’s place and to imagine how they would feel in the same situation.

35 A I like to feel free to do what I want to do.
B I like to observe how another individual acts in a given situation.

36 A I like to accomplish tasks that others recognize as requiring skill and effort.
B I like my friends to encourage me when I meet with failure.

37 A When planning something, I like to get suggestions from other people whose opinions I respect.
B I like my friends to treat me kindly.

38 A I like to have my life so arranged that it runs smoothly and without much change in my plans.
B I like my friends to feel sorry for me when I am sick.

39 A I like to be the center of attention in a group.
B I like my friends to make a fuss over me when I am hurt or sick.

40 A I like to avoid situations where I am expected to do things in a conventional way.
B I like my friends to sympathize with me and to cheer me up when I am depressed.

41 A I would like to write a great novel or play.
B When serving on a committee, I like to be appointed or elected chairperson.

42 A When in a group, I like to accept the leadership of someone else in deciding what the group is going to do.
B I like to supervise and to direct the actions of other people whenever I can.

43 A I like to keep my letters, bills, and other papers neatly arranged and filed according to some system.
B I like to be one of the leaders in the organizations and groups to which I belong.

44 A I like to ask questions which I know no one will be able to answer.
B I like to tell other people how to do their jobs.

45 A I like to avoid responsibilities and obligations.
B I like to be called upon to settle arguments and disputes between others.

46 A I would like to be a recognized authority in some job, profession, or field of specialization.
B I feel guilty whenever I have done something I know is wrong.

47 A I like to read about the lives of great men and women.
B I feel that I should confess the things that I have done that I regard as wrong.

48 A I like to plan and organize the details of any work that I have to undertake.
B When things go wrong for me, I feel that I am more to blame than anyone else.

49 A I like to use words which other people often do not know the meaning of.
B I feel that I am inferior to others in most respects.

50 A I like to criticize people who are in a position of authority.
B I feel tired in the presence of other people I regard as my superiors.

51 A I like to do my very best in whatever I undertake.
B I like to help other people who are less fortunate than I am.

52 A I like to find out what great men and women have thought about various problems in which I am interested.
B I like to be generous with my friends.

53 A I like to make a plan before starting in to do something difficult.
B I like to do small favors for my friends.

54 A I like to tell other people about adventures and strange things that have happened to me.
B I like my friends to confide in me and to tell me their troubles.

55 A I like to say what I think about things.
B I like to forgive my friends who may sometimes hurt me.

56 A I like to be able to do things better than other people can.
B I like to eat in new and strange restaurants.

57 A I like to conform to custom and to avoid doing things that people I respect might consider unconventional.
B I like to participate in new fads and fashions.

58 A I like to have my work organized and planned before beginning it.
B I like to travel and to see the country.

59 A I like people to notice and to comment upon my appearance when I am out in public.
B I like to move about the country and to live in different places.

60 A I like to be independent of others in deciding what I want to do.
B I like to do new and different things.

61 A I like to be able to say that I have done a difficult job well.
B I like to work hard at any job I undertake.

62 A I like to tell my superiors that they have done a good job on something, when I think they have.
B I like to complete a single job or task at a time before taking on others.

63 A If I have to take a trip, I like to have things planned in advance.
B I like to keep working at a puzzle or problem until it is solved.

64 A I sometimes like to do things just to see what effect it will have on others.
B I like to sink at a job or problem even when it may seem as if I am not getting anywhere with it.
I like to do things that other people regard as unconventional.

I like to put in long hours of work without being distracted.

I would like to accomplish something of great significance.

I like to kiss attractive persons of the opposite sex.

I like to praise someone I admire.

I like to be regarded as physically attractive by those of the opposite sex.

I like to keep my things neat and orderly on my desk or work space.

I like to be in love with someone of the opposite sex.

I like to talk about my achievements.

I like to listen to or to tell jokes in which sex plays a major part.

I like to do things in my own way and without regard to what others may think.

I like to read books and plays in which sex plays a major part.

I would like to write a great novel or play.

I like to attack points of view that are contrary to mine.

When I am in a group, I like to accept the leadership of someone else in deciding what the group is going to do.

I feel like criticizing someone publicly if he or she deserves it.

I like to have my life so arranged that it runs smoothly and without much change in my plans.

I get so angry that I feel like throwing and breaking things.

I like to ask questions which I know no one will be able to answer.

I like to tell other people what I think of them.

I like to avoid responsibilities and obligations.

I feel like making fun of people who do things that I regard as stupid.

I like to be loyal to my friends.

I like to do my very best in whatever I undertake.

I like to observe how another individual feels in a given situation.

I like to be able to say that I have done a difficult job well.

I like my friends to encourage me when I meet with failure.

I like to be successful in things undertaken.

I like to be one of the leaders in the organizations and groups to which I belong.

I like to be able to do things better than other people can.

When things go wrong for me, I feel that I am more to blame than anyone else.

I like to solve puzzles and problems that other people have difficulty with.
97 A I like to study and to analyze the behavior of others.
B I like to do things that other people regard as unconventional.

98 A I like my friends to feel sorry for me when I am sick.
B I like to avoid situations where I am expected to do things in a conventional way.

99 A I like to supervise and to direct the actions of other people whenever I can.
B I like to do things in my own way without regard to what others may think.

100 A I feel that I am inferior to others in most respects.
B I like to avoid responsibilities and obligations.

101 A I like to be successful in things undertaken.
B I like to form new friendships.

102 A I like to analyze my own motives and feelings.
B I like to make as many friends as I can.

103 A I like my friends to help me when I am in trouble.
B I like to do things for my friends.

104 A I like to argue for my point of view when it is attacked by others.
B I like to write letters to my friends.

105 A I feel guilty whenever I have done something I know is wrong.
B I like to have strong attachments with my friends.

106 A I like to share things with my friends.
B I like to analyze my own motives and feelings.

107 A I like to accept the leadership of people I admire.
B I like to understand how my friends feel about various problems they have to face.

108 A I like my friends to do many small favors for me cheerfully.
B I like to judge people by why they do something—not by what they actually do.

109 A When with a group of people, I like to make the decisions about what we are going to do.
B I like to predict how my friends will act in various situations.

110 A I feel better when I give in and avoid a fight, than I would if I tried to have my own way.
B I like to analyze the feelings and motives of others.

111 A I like to form new friendships.
B I like my friends to help me when I am in trouble.

112 A I like to judge people by why they do something—not by what they actually do.
B I like my friends to show a great deal of affection toward me.

113 A I like to have my life so arranged that it runs smoothly and without much change in my plans.
B I like my friends to feel sorry for me when I am sick.

114 A I like to be called upon to settle arguments and disputes between others.
B I like my friends to do many small favors for me cheerfully.

115 A I feel that I should confess the things that I have done that I regard as wrong.
B I like my friends to sympathize with me and to cheer me up when I am depressed.

116 A I like to do things with my friends rather than by myself.
B I like to argue for my point of view when it is attacked by others.

117 A I like to think about the personalities of my friends and to try to figure out what makes them as they are.
B I like to be able to persuade and influence others to do what I want to do.

118 A I like my friends to sympathize with me and to cheer me up when I am depressed.
B When with a group of people, I like to make the decisions about what we are going to do.

119 A I like to ask questions which I know no one will be able to answer.
B I like to tell other people how to do their jobs.

120 A I feel timid in the presence of other people I regard as my superiors.
B I like to supervise and to direct the actions of other people whenever I can.

121 A I like to participate in groups in which the members have warm and friendly feelings toward one another.
B I feel guilty whenever I have done something I know is wrong.

122 A I like to analyze the feelings and motives of others.
B I feel depressed by my own inability to handle various situations.

123 A I like my friends to feel sorry for me when I am sick.
B I feel better when I give in and avoid a fight, than I would if I tried to have my own way.

124 A I like to be able to persuade and influence others to do what I want.
B I feel depressed by my own inability to handle various situations.

125 A I like to criticize people who are in a position of authority.
B I feel timid in the presence of other people I regard as my superiors.

126 A I like to participate in groups in which the members have warm and friendly feelings toward one another.
B I like to help my friends when they are in trouble.

127 A I like to analyze my own motives and feelings.
B I like to sympathize with my friends when they are hurt or sick.

128 A I like my friends to help me when I am in trouble.
B I like to treat other people with kindness and sympathy.

129 A I like to be one of the leaders in the organizations and groups to which I belong.
B I like to sympathize with my friends when they are hurt or sick.
130 A I feel that the pain and misery that I have suffered has done me more good than harm.
B I like to show a great deal of affection toward my friends.

131 A I like to do things with my friends rather than by myself.
B I like to experiment and to try new things.

132 A I like to think about the personalities of my friends and to try to figure out what makes them as they are.
B I like to try new and different jobs—rather than to continue doing the same old things.

133 A I like my friends to be sympathetic and understanding when I have problems.
B I like to meet new people.

134 A I like to argue for my point of view when it is attacked by others.
B I like to experience novelty and change in my daily routine.

135 A I feel better when I give in and avoid a fight, than I would if I tried to have my own way.
B I like to move about the country and to live in different places.

136 A I like to do things for my friends.
B When I have some assignment to do, I like to start in and keep working on it until it is completed.

137 A I like to analyze the feelings and motives of others.
B I like to avoid being interrupted while at my work.

138 A I like my friends to do many small favors for me cheerfully.
B I like to stay up late working in order to get a job done.

139 A I like to be regarded by others as a leader.
B I like to put in long hours of work without being disturbed.

140 A If I do something that is wrong, I feel that I should be punished for it.
B I like to stick at a job or problem even when it may seem as if I am not getting anywhere with it.

141 A I like to be loyal to my friends.
B I like to go out with attractive persons of the opposite sex.

142 A I like to predict how my friends will act in various situations.
B I like to participate in discussions about sex and sexual activities.

143 A I like my friends to show a great deal of affection toward me.
B I like to become sexually excited.

144 A When with a group of people, I like to make the decisions about what we are going to do.
B I like to engage in social activities with persons of the opposite sex.

145 A I feel depressed by my own inability to handle various situations.
B I like to read books and plays in which sex plays a major part.

146 A I like to write letters to my friends.
B I like to read newspaper accounts of murders and other forms of violence.

147 A I like to predict how my friends will act in various situations.
B I like to attack points of view that are contrary to mine.

148 A I like my friends to make a fuss over me when I am hurt or sick.
B I feel like blaming others when things go wrong for me.

149 A I like to tell other people how to do their jobs.
B I feel like getting revenge when someone has insulted me.

150 A I feel that I am inferior to others in most respects.
B I feel like telling other people off when I disagree with them.

151 A I like to help my friends when they are in trouble.
B I like to do my very best in whatever I undertake.

152 A I like to travel and to see the country.
B I like to accomplish tasks that others recognize as requiring skill and effort.

153 A I like to work hard at any job I undertake.
B I would like to accomplish something of great significance.

154 A I like to go out with attractive persons of the opposite sex.
B I like to be successful in things undertaken.

155 A I like to read newspaper accounts of murders and other forms of violence.
B I would like to write a great novel or play.

156 A I like to do small favors for my friends.
B When planning something, I like to get suggestions from other people whose opinions I respect.

157 A I like to experience novelty and change in my daily routine.
B I like to tell my superiors that they have done a good job on something, when I think they have.

158 A I like to stay up late working in order to get a job done.
B I like to praise someone I admire.

159 A I like to become sexually excited.
B I like to accept the leadership of people I admire.

160 A I feel like getting revenge when someone has insulted me.
B When I am in a group, I like to accept the leadership of someone else in deciding what the group is going to do.

161 A I like to be generous with my friends.
B I like to make a plan before starting in to do something difficult.
162 A I like to meet new people.
     B Any written work that I do I like to have precise,
    neat, and well organized.
163 A I like to finish any job or task that I begin.
     B I like to keep my things neat and orderly on my desk
    or workspace.
164 A I like to be regarded as physically attractive by those
     of the opposite sex.
     B I like to plan and organize the details of my work
    that I undertake.
165 A I like to talk other people what I think of them.
     B I like to have my meals organized and a definite
    time set aside for eating.
166 A I like to show a great deal of affection toward
     my friends.
     B I like to say things that are regarded as wise and
    clever by other people.
167 A I like to try new and different jobs—rather than to
     continue doing the same old things.
     B I sometimes like to do things just to see what effect
    it will have on others.
168 A I like to stick at a job or problem even when it may
     seem as if I am not getting anywhere with it.
     B I like people to notice and to comment upon my
    appearance when I am out in public.
169 A I like to read books and plays in which sat plays a
     major part.
     B I like to be the center of attention in a group.
170 A I feel like blaming others when things go wrong
     for me.
     B I like to ask questions which I know no one will
    be able to answer.
171 A I like to sympathize with my friends when they are
     hurt or sick.
     B I like to say what I think about things.
172 A I like to eat in new and strange restaurants.
     B I like to do things that other people regard as
    unconventional.
173 A I like to complete a single job or task at a time be-
     fore taking on others.
     B I like to feel free to do what I want to do.
174 A I like to participate in discussions about sex and
     sexual activities.
     B I like to do things in my own way without regard
    to what others may think.
175 A I get so angry that I feel like throwing and break-
     ing things.
     B I like to avoid responsibilities and obligations.
176 A I like to help my friends when they are in trouble.
     B I like to be loyal to my friends.
177 A I like to do new and different things.
     B I like to form new friendships.
178 A When I have some assignment to do, I like to start
     in and keep working on it until it is completed.
     B I like to participate in groups in which the members
    have warm and friendly feelings toward one another.
179 A I like to go out with attractive persons of the
     opposite sex.
     B I like to make as many friends as I can.
180 A I like to attack points of view that are contrary to
     mine.
     B I like to write letters to my friends.
181 A I like to be generous with my friends.
     B I like to observe how another individual feels in a
    given situation.
182 A I like to eat in new and strange restaurants.
     B I like to put myself in someone else's place and to
    imagine how I would feel in the same situation.
183 A I like to stay up late working in order to get a job
     done.
     B I like to understand how my friends feel about vari-
    ous problems they have to face.
184 A I like to become sexually excited.
     B I like to study and to analyze the behavior of others.
185 A I feel like making fun of people who do things that
     I regard as stupid.
     B I like to predict how my friends will act in various
    situations.
186 A I like to forgive my friends who may sometimes
     hurt me.
     B I like my friends to encourage me when I meet with
    failure.
187 A I like to experiment and to try new things.
     B I like my friends to be sympathetic and understand-
    ing when I have problems.
188 A I like to keep working at a puzzle or problem until
     it is solved.
     B I like my friends to treat me kindly.
189 A I like to be regarded as physically attractive by those
     of the opposite sex.
     B I like my friends to show a great deal of affection
    toward me.
190 A I feel like criticizing someone publicly if he or she
     deserves it.
     B I like my friends to make a fuss over me when I am
    hurt or sick.
191 A I like to show a great deal of affection toward my
     friends.
     B I like to be regarded by others as a leader.
192 A I like to try new and different jobs—rather than to
     continue doing the same old things.
     B When serving on a committee, I like to be appointed
    as elected chairperson.
193 A I like to finish any job or task that I begin.
     B I like to be able to persuade and influence others to
    do what I want.
194 A I like to participate in discussions about sex and sexual activities.
B I like to be called upon to settle arguments and disputes between others.
195 A I get so angry that I feel like throwing and breaking things.
B I like to tell other people how to do their jobs.
196 A I like to show a great deal of affection toward my friends.
B When things go wrong for me, I feel that I am more to blame than anyone else.
197 A I like to move about the country and to live in different places.
B If I do something that is wrong, I feel that I should be punished for it.
198 A I like to stick at a job or problem even when it may seem as if I am not getting anywhere with it.
B I feel that the pain and misery that I have suffered has done me more good than harm.
199 A I like to read books and play in which sex plays a major part.
B I feel that I should confess the things that I have done that I regard as wrong.
200 A I feel like blaming others when things go wrong for me.
B I feel that I am inferior to others in most respects.
201 A I like to do my very best in whatever I undertake.
B I like to help other people who are less fortunate than I am.
202 A I like to do new and different things.
B I like to treat other people with kindness and sympathy.
203 A When I have some assignment to do, I like to start in and keep working on it until it is completed.
B I like to help other people who are less fortunate than I am.
204 A I like to engage in social activities with persons of the opposite sex.
B I like to forgive my friends who may sometimes hurt me.
205 A I like to attack points of view that are contrary to mine.
B I like my friends to confide in me and to tell me their troubles.
206 A I like to treat other people with kindness and sympathy.
B I like to travel and to see the country.
207 A I like to conform to custom and to avoid doing things that people I respect might consider unconventional.
B I like to participate in new fads and fashions.
208 A I like to work hard at any job I undertake.
B I like to experience novelty and change in my daily routine.
209 A I like to kiss attractive persons of the opposite sex.
B I like to experiment and to try new things.
210 A I feel like telling other people off when I disagree with them.
B I like to participate in new fads and fashions.
211 A I like to help other people who are less fortunate than I am.
B I like to finish any job or task that I begin.
212 A I like to move about the country and to live in different places.
B I like to put in long hours of work without being distracted.
213 A If I have to take a trip, I like to have things planned in advance.
B I like to keep working at a puzzle or problem until it is solved.
214 A I like to be in love with someone of the opposite sex.
B I like to complete a single job or task before taking on others.
215 A I like to tell other people what I think of them.
B I like to avoid being interrupted while at my work.
216 A I like to do small favors for my friends.
B I like to engage in social activities with persons of the opposite sex.
217 A I like to meet new people.
B I like to kiss attractive persons of the opposite sex.
218 A I like to keep working at a puzzle or problem until it is solved.
B I like to be in love with someone of the opposite sex.
219 A I like to talk about my achievements.
B I like to listen to or to tell jokes in which sex plays a major part.
220 A I feel like making fun of people who do things that I regard as stupid.
B I like to listen to or to tell jokes in which sex plays a major part.
221 A I like my friends to confide in me and to tell me their troubles.
B I like to read newspaper accounts of murders and other forms of violence.
222 A I like to participate in new fads and fashions.
B I feel like crucifying someone publicly if he or she deserves it.
223 A I like to avoid being interrupted while at my work.
B I feel like telling other people off when I disagree with them.
224 A I like to listen to or to tell jokes in which sex plays a major part.
B I feel like getting revenge when someone has insulted me.
225 A I like to avoid responsibilities and obligations.
B I feel like making fun of people who do things that I regard as stupid.
APPENDIX C
RESEARCH CONSENT FORM

I, ____________________________, as a Head Nurse employed by the Department of Nursing at Northwestern Memorial Hospital, wish to participate in a research project entitled, "Establishing a Profile of First-Line Managers: Needs, Values, and Job Reactions for Head Nurses," being conducted by Mary Fleming.

I participate with the understanding that all information will be reported in a manner which does not reveal my identity. I acknowledge that the investigator has explained to me the purpose of and need for this research. My participation includes completion of certain questionnaires during working hours.

I may withdraw from participation in this study at any time without jeopardizing my employment status.

The Principal Investigator is available at 864-2523, 1027 Greenwood Street, Evanston, 60201, to answer questions.

I freely and voluntarily consent to participate in this research project.

__________________________   __________________________
(signature of volunteer)       (signature of witness)

__________________________   __________________________
(signature of investigator)    (date)
DEMOGRAPHIC INFORMATION

Please respond to the following categories as completely as possible.

Age ______

Basic Nursing Educational Preparation ___ADN ___RN ___BSN

Highest Degree Earned ______

Degree in Progress ___yes ___no

Type of Degree Sought ____________________________ (please specify)

Division of Nursing ___Wesley
_______Passavant
_______Psychiatry
_______Prentice
_______Olson
_______Other (please specify)

Years in Nursing ______

Years at NMH ______

Years in Present Position ______

Hired Directly into Present Position ___yes ___no

Promoted from Within NMH to Present Position ___yes ___no
### The Observed Distribution of Consistency Scores and the Theoretical Distribution

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*Expected in terms of the binomial \(N(p + q)^n\)*
where \(N = 1509\), \(p = .3\), and \(n = 15\).
### Intercorrelations of the Variables Measured by the EPPS

**N = 1509**

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* Means and standard deviations for each variable appear in Table 2.
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Total group mean, standard deviation, results of tests of occupational group differences in mean and variances, by MSQ scale (N=2,955)

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<td>4. Advancement</td>
<td>16.5</td>
<td>15.07</td>
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<tr>
<td>5. Authority</td>
<td>18.2</td>
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<td>6. Company policies and practices</td>
<td>17.3</td>
<td>9.65</td>
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<td>7. Compensation</td>
<td>16.9</td>
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<td>8. Co-workers</td>
<td>20.1</td>
<td>9.78</td>
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<td>9. Creativity</td>
<td>18.2</td>
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<tr>
<td>10. Independence</td>
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<td>11. Moral values</td>
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<td>12. Recognition</td>
<td>17.5</td>
<td>10.75</td>
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<td>13. Responsibility</td>
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<td>14. Security</td>
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<td>15. Social service</td>
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<td>17. Supervision-human relations</td>
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<td>13.17</td>
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<td>18. Supervision-technical</td>
<td>18.7</td>
<td>12.77</td>
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<td>19. Variety</td>
<td>19.0</td>
<td>15.13</td>
</tr>
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<td>20. Working conditions</td>
<td>18.6</td>
<td>15.84</td>
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<td>21. General satisfaction</td>
<td>75.6</td>
<td>19.51</td>
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a) F-test of significance of difference between means.
b) Probability of error in rejecting null hypothesis of no difference in group means if \( p \leq .05 \).
c) Chi-square for Bartlett's test of homogeneity of variance.
d) Probability of error of rejecting null hypothesis of no differences in group variances, if \( p \leq .05 \), based on Bartlett's test of homogeneity of variance, with 24 degrees of freedom.
Please rate Head Nurse ____________________ as 1-7 in relation to job performance on the following categories. Circle the choice of your responses. Please consider performance in the last three months.

1. Staff Management
   A. Head Nurse selects, maintains, and develops unit staff.
      1  2  3  4  5  6  7
      low                   high
   B. Head Nurse provides for professional growth of staff.
      1  2  3  4  5  6  7
      low                   high

2. Unit Management
   A. Maintains effective communication among staff members.
      1  2  3  4  5  6  7
      low                   high
   B. Exercises effective cost control.
      1  2  3  4  5  6  7
      low                   high
   C. Plans staffing to meet patient care needs of the unit.
      1  2  3  4  5  6  7
      low                   high
   D. Ensures a safe and clean environment for patients, staff, and visitors.
      1  2  3  4  5  6  7
      low                   high
3. Patient Care Management

A. Organizes patient care based on knowledge of nursing needs of all patients on the unit and established standards of care.

1 2 3 4 5 6 7
low  high

B. Evaluates patient care rendered.

1 2 3 4 5 6 7
low  high

C. Maintains self-growth and professional practice.

1 2 3 4 5 6 7
low  high
APPROVAL SHEET

The dissertation submitted by Missy Fleming has been read and approved by the following committee:

Dr. Marilyn Susman, Director
Assistant Professor, Counseling Psychology and Higher Education, Loyola

Dr. John Wellington
Professor, Counseling Psychology and Higher Education, Loyola

Dr. Todd Hoover
Associate Professor, Administration and Supervision, Loyola

Dr. Claudia Anderson
Associate Professor, Programs in Nursing, Northwestern University

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Ph.D.

12-4-84
Date

[Signature]
Director's Signature