

PERSONALITY CHARACTERISTICS OF OPERATING
ROOM AND SURGICAL STAFF NURSES

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DEDICATION

To Dore'

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It is better to have loved, and lost, than not
to love at all.

Alfred, Lord Tennyson

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CHAPTER 1

INTRODUCTION

In the current and stringent economy of the United States, losses of work time, money, and manpower are causes of concern to employers of nurses and suggest that a close analysis of the relevant factors must be undertaken. One aspect of the concerns may be the selection of personnel who can be predicted to fulfill the requirements of the job and who will experience job satisfaction. Job satisfaction may then result in less job turnover of staff. The importance of personality was recognized by Miles (1934) who believed that it was desirable to study the validity of any available test data to identify recognizable traits that would contribute toward success in nursing.

Cooper, Lewis, and Moores (1976) maintained that there must be an element beyond skill and aptitude which relates to the person's commitment to nursing as a profession and suggested that this element might be measurable through the vehicle of personality testing. Studies of personality characteristics of graduate and

professional nurses in specialty areas have focused on psychiatric nurses and public health nurses (George & Stephens, 1968; Stauffacher & Navran, 1968). One of the nursing specialties that appeared to be overlooked in the research was that of nurses in the operating room. This study was an effort to explore the personality characteristics of operating room (OR) nurses and surgical staff nurses.

Problem Statement

This study addressed the following problems:

1. Are the identified personality need hierarchies different when comparing operating room nurses and surgical staff nurses?
2. Do age and years of experience become significant factors in the personality need hierarchies of operating room and surgical staff nurses?

Justification of the Problem

Graham (1967) implied that character or personality patterns which distinguish nurses from other professionals might help in the eventual definition of success of effectiveness. Character patterns could be of value in counseling and placement of nurses in different work areas.

The prediction of success is complex and difficult under ideal circumstances. In nursing, such prediction becomes even more difficult because of the increasing diversification of possible activities within the profession. The choice of a specialty in nursing, as in medicine and some other professions, becomes a matter of a second occupational choice within the broad, originally chosen field. The choice of a specialty in nursing defines the kind of patients with whom one will work; the kinds of relationships one will have with those patients, to a large extent; and often, the type of activity within that specialty such as practice, teaching, consultation, research, or administration (Lukens, 1965).

The development of various fields of specialization within nursing with differing activities, settings, and relationships presumably has widened the field for the accommodation of different personality types. Since the focus of nursing specialties varies, it would seem that there would be differences in personality traits among nursing personnel in different specialty areas.

Previous research studies have been conducted comparing the personality characteristics of nurses in the

specialty areas of psychiatry, public health, medical-surgical, obstetrics, and pediatrics (Bruhn, Floyd, & Bunce, 1978; Burns, Lapine, & Andrews, 1978; Cohen, Trehub, & Morrison, 1965; George & Stephens, 1968; Lentz & Michaels, 1960; Miller, 1965; Navran & Stauffacher, 1958). No studies were found which compared the personality characteristics of those nurses dealing with the surgical patient. This would include those nurses in the operating room and surgical staff nurses.

Because surgical staff nurses and operating room nurses deal with the same patients and yet are distinct specialty areas, it might be expected that they would exhibit similar personality traits. If personality traits of nurses working in specialty areas are identified, this could possibly assist in the counseling of nursing students toward a selection of a specialty area. This in turn may contribute to greater job satisfaction and assist in the retention of employees in nursing specialty areas.

Conceptual Framework

The conceptual framework for this study was based upon Holland's (1966) theory of vocational choice, from

which the concept of personality types is derived. The theory is primarily concerned with explaining how people make occupational choices, what leads them to change jobs or vocations, and what personal and environmental factors are conducive to vocational achievement. To a lesser degree, the theory is also concerned with personal development and personality. Holland (1966) stated "vocational choice is a function of personality" (p. 19).

Holland further stated that the choice, stability and satisfaction with, and achievement in the major field will be influenced by personality in the same ways that vocational choice is influenced. Presumably, congruent person-environment interactions produce stability and satisfaction because they involve situations where the tasks and problems presented by the environment are well suited to the person's coping abilities. People search for environments and vocations that will permit them to exercise their skills and abilities, to express their attitudes and values, to take on agreeable problems and roles, and to avoid disagreeable ones.

The central assumption of Holland's theory of vocation is that there are several different personal orientations to life. People can be categorized as one of

six personality types: realistic, intellectual, social, conventional, enterprising, and artistic.

Holland stated that the types are assumed to represent common outcomes of growing up in our culture. Each type is described in terms of a theoretical model called the model orientation. The model orientation is a cluster of characteristic adaptive behaviors (coping mechanisms), psychological needs and motives, self-concepts, life history, vocational and educational goals, preferred occupational roles, aptitudes, and intelligence. A person's resemblance to each of the six model orientations is called the personality pattern. The single model that the person most closely resembles is his/her personality type.

Assumptions

For the purposes of this study, the following assumptions were made:

1. The choice of a vocation is an expression of personality.
2. Vocational stereotypes have reliable and important psychological and sociological meanings. In the same way that people are judged by their friends, dress, and actions, they are also judged by their vocations.

3. The members of a vocation have similar personalities and similar histories of personal development. If a person enters a given vocation because of his/her particular personality and history, it follows that each vocation attracts and retains people with similar personalities.

4. Because people in a vocational group have similar personalities, they will respond to many situations and problems in similar ways, and they will create characteristic interpersonal environments.

5. Vocational satisfaction, stability, and achievement depend on the congruency between one's personality and the environment (composed largely of other people) in which one works.

Research Questions

The objective of this investigation was to study and compare the personality characteristics of a group of operating room (OR) nurses and a group of surgical staff nurses. The research questions to be asked in this study were:

1. What are the need hierarchies of OR nurses and surgical staff nurses as measured by the Edwards Personal Preference Schedule (EPPS)?

2. What are the differences and similarities of personality characteristics between OR nurses and surgical staff nurses?

3. Is age a significant factor in the ranking of the need hierarchies of OR nurses and surgical staff nurses?

4. Do years of experience become a significant factor in determining need hierarchies of OR nurses and surgical staff nurses?

Definition of Terms

For purposes of this study, the following terms were defined:

1. Personality characteristics/variables--a set of distinguishing traits or qualities which help identify a person or a group of people. In this study, the characteristics under consideration are those enumerated in the EPPS as follows:

(a) Achievement: To accomplish something different; to be a success; to do one's best.

(b) Deference: To respect superiors; to accept leadership; to conform to custom.

(c) To like order: To aim for perfection in detail; to have things planned and organized.

(d) Exhibition: To be the center of attention; to make an impression; to have an audience.

(e) Autonomy: To be free to do what you want; to defy convention; to be critical of authority.

(f) Affiliation: To please and win affection; to be loyal to friends; to form strong attachments.

(g) Intraception: To be introspective; to be interested in motives and feelings; to analyze the behavior of others.

(h) Succorance: To desire sympathy; to want encouragement; to have others interested in your problems.

(i) Dominance: To dominate others; to be a leader; to influence others to make decisions.

(j) Abasement: To feel inferior; to feel guilty; to feel timid; to withdraw from unpleasant situations.

(k) Nurturance: To sympathize with others; to be generous with others; to encourage others.

(l) Change: To try new and different things; to like to travel; to experience novelty and change.

(m) Endurance: To persist; to keep at a task until it is finished; to put in long hours of uninterrupted work.

(n) Heterosexuality: To enjoy heterosexual activities; to be interested in the opposite sex.

(o) Aggression: To criticize others publicly; to tell others what one thinks of them; to become angry. (Edwards, 1959, p. 19)

2. Operating room (OR) nurse--a registered nurse, licensed to practice in the state of Texas, and employed on a full-time basis in an operating room. The full-time basis being as defined by the employing agency.

3. Surgical staff nurse--a registered nurse, licensed to practice in the state of Texas and employed on a full-time basis in any area of the hospital that cares for surgical patients. The full-time basis being as defined by the employing agency.

4. Need hierarchies--the rank order of the raw scores on the 15 personality variables on the EPPS as determined by the participants.

5. Years of experience--the numerical summation of years employed full-time in nursing as recorded on the demographic data information.

Limitations

The limitations recognized for this study were as follows:

1. Age, marital status, race, ethnic background, religious preference, and socioeconomic status were not controlled for in this study.

2. Basic nursing education was not controlled.

3. Nurses included in the study would vary according to experience, length of employment, and preference of specialty area.

4. Personality traits contrary to norms and inherent to the individual could not be controlled.

5. The rationale for preference of work area could not be controlled.

Summary

It has been suggested that if nurses were employed in a work area which suited their personalities, then job satisfaction and success would be evidenced through retention and less turnover of staff. The questions for research and the conceptual framework of Holland's (1966) theory of vocational choice have been presented in this chapter. Assumptions, limitations of the study, and definitions of terms pertinent to this study have also been offered.

CHAPTER 2

REVIEW OF LITERATURE

This study was designed to determine if personality need hierarchies differ between operating room and surgical staff nurses, and if age and years of experience contributed to a difference in the rank order of need hierarchies. Deese (1964) proposed that the study of personality is the study of the psychological characteristics that mark resemblances and differences between individual human beings. In order to compare any existing similarities between operating room (OR) nurses and previous research studies on nurses, a review of the literature was conducted in the areas of personality and the study of the personality characteristics of nurses.

Personality

Lazarus (1971) stated that the most simple and most traditional way of describing a person in specific terms is to identify patterns of behavior characterizing him/her and to label him/her with trait names. "Traits" are dispositional concepts; that is, they refer to tendencies

to act or react in certain ways. Traits must be distinguished from "state" concepts, which refer to a reaction which is now taking place.

Kaluger and Unkovic (1969) concluded that personality is multidimensional. The "traits" approach to describing personality is a way of describing the many aspects of behavior, inner and outer, that an individual may exhibit. A trait is a dimension or aspect of personality. It comprises a group of consistent and related reactions that characterize a person's typical adjustments. Traits either are directly observable or are inferred. Traits are not active at all times, but they are distinguished by low thresholds of arousal. To have value as a trait, a behavioral response, besides being unique, should be a minute aspect of a person's total behavior. Traits, therefore, are subject to measurement.

Kaluger and Unkovic determined that although everyone agrees that personality consists of many traits, there are differences of opinion as to the number of traits that must be cited in order to describe a person thoroughly. Many psychologists have sought practical methods for an approach to seeking traits and one fruitful

approach was to look for groups, or clusters, of traits that ordinarily exist together. Psychologists have not settled on any one set of traits, for there are no one set of traits that can be considered final. Most psychologists have found that it is important to have a set of traits that are significant for a particular purpose and that can be used for making comparisons among individuals.

There are many possible kinds of traits. The range of such traits includes motive traits referring to the kinds of goals which behavior is directed; ability traits referring to general and specific capacities and skills; tempermental traits, such as tendencies toward optimism, depression, energy, etc.; and stylistic traits involving gestures, styles of behaving, and thinking not functionally related to the goals of that behavior. Trait theorists have approached the task of defining trait categories quite differently.

Lazarus (1971) proposed that the dean of personality traits unquestionably was Gordon Allport. Allport (cited in Lazarus, 1971) regarded the trait as the natural unit of description of personality. Allport and Odbert (cited in Lazarus, 1971) examined an unabridged English dictionary

locating 17,952 words designating personal forms of behavior of a total of 400,000. Allport and Odbert narrowed down the list of trait names of 4,541. These researchers then set about formalizing in theory what is part of the common sense, intuitive approach to personality used by the layman.

Allport (cited in Lazarus, 1971) emphasized the idea that traits are integrated properties of a person, not merely part of the imagination of the beholder. Allport also emphasized the uniqueness of every person, not only in each individual trait, but in the organization of these traits into an integrated whole. Allport emphasized the view that traits are not independent entities within a person, but an interdependent set of attributes which combine to produce behavioral effects.

Lazarus (1971) further elaborated that if Allport was the dean of trait theorists, then Cattell (cited in Lazarus, 1971), in a sense, is one of trait theory's main architects and engineers. Lazarus described Cattell's main effort as having been directed toward systematically reducing the list of personality traits to a small manageable number, by means of a statistical method called "factor analysis." This method analyzed

the intercorrelations among the personality-relevant behaviors collected through observational and pencil and paper testing.

Cattell (cited in Lazarus, 1971) stated that independent factors or source traits can be identified by factor analysis and that tests can be devised to assess these factors. Cattell developed a questionnaire for this purpose which he called the 16PF. The 16PF was designed to measure the 16 source traits which Cattell called "primary traits."

Experimental and statistical methods have been used to discover the patterns of traits that tend to cluster together. The most refined statistical techniques used for the above purpose is factor analysis. Cattell (cited in Lazarus, 1971) pioneered the application of factor analysis to the study of personality. Ultimately, Cattell concluded that from 4,000 trait names, that 16 factors, of "primary traits," were the basic underlying characteristics to be found in all the items and trait names studied.

Hjelle and Ziegler (1981) stated that Murray (1938) is more closely identified than other theorists with motivation as a dynamic, energizing, and directing force within

persons. Central to this theory was a great emphasis on neuro-physiological processes as the source of human functioning. Murray (1938) believed that the anatomical center of personality is the brain--the site of our emotions, the seat of consciousness, and the repository of memory traces, concepts, attitudes, needs, beliefs, and value systems.

Murray (1951) provided several answers to the question of what is personality.

Personality may be biologically defined as the governing organ, or superordinate institution of the body. As such, it is located in the brain. No brain, no personality. (p. 267)

Murray's various definitions of personality all stress that it is a hypothetical entity, rather than something of real physical substance. Personality is not the brain itself, but the hypothetical structure of the mind (Murray, 1951).

According to Murray (1968), personality represented a process of development from birth to death. Personality integrates and directs the person's behavior. It is what accounts for the recurring, stabilizing elements in behavior that help individuals adapt to their environment (Murray, 1968).

Hjelle and Ziegler (1981) indicated that Murray was recognized as a major personality theorist primarily because of his extensive efforts to demonstrate the pervasive effects of needs on human actions. Murray (1938) defined "need" as a hypothetical construct which stands for a force in the brain region, a force either internally or externally instigated which organizes other psychological processes.

According to Murray's (1938) system, needs are classified in a nonhierarchical manner and consist of 28 "psychogenic" needs and 12 "viscerogenic" (physiological) needs. Murray's personality theory sought to explain how people fundamentally differ from one another through the realm of needs. Murray's need listing does not imply that all people experience all needs to the same degree, nor at the same time.

Murray proposed five criteria by which needs could be recognized. The consequence or end result of the mode of behavior involved is the first criterion. The second criterion is the kind of pattern of behavior involved. The selective perception of and response to a group of circumscribed stimulus objects constitutes the third criterion. The fourth criterion is the expression

of a characteristic emotion or feeling. Finally, the fifth criterion is the manifestation of satisfaction associated with the attainment of a certain effect or the manifestation of dissatisfaction associated with the failure to attain a certain effect (Murray, 1938).

Lazarus (1971) stated that the task of assessment of personality can be conceived in two ways. First is the measurement of individual attributes or traits which comprise the personality structure; and second, is the assessment of the "whole" person with emphasis on the integration of the individual parts.

Anastasi (1976) concluded that among the personality theories that have stimulated test development, one of the most prolific has been the manifest need system proposed by Murray (1938) and his associates at the Harvard Psychological Clinic. One of the first inventories designed to assess the strengths of such needs was the Edwards Personal Preference Schedule (EPPS). Beginning with 15 needs drawn from Murray's list, Edwards (1959) prepared sets of items whose content appeared to fit each of these needs.

Lanyon and Goodstein (1971) stated that the sophistication of the EPPS is found in its forced-choice

format. Pairs of self-reference statements are presented simultaneously to the respondent, who in each case is to choose the statement which is the more self-descriptive. There are 210 such choices for the respondent to make, and he/she can endorse the set of statements related to each need from 0 to 28 times. Every need is paired twice with every other need, requiring each statement to be repeated three or four times. The strength of a particular need is determined by the number of times, out of the 28 options, that the respondent chooses or endorses the statements representing that need. Fifteen additional pairs are included in order to evaluate the consistency or reliability of an individual's response.

The EPPS introduced some ingenious internal checks. To provide an index of respondent consistency, 15 pairs of statements are repeated in identical form. Another check yields a profile stability score, which is the correlation between the individual's odd and even scores of the 15 scales (Anastasi, 1976). Anastasi concluded that it is important to bear in mind that the EPPS employs ipsative scores--that is, the strength of each need is expressed not in absolute terms, but in relation to the strength of the individual's other needs.

Personality Characteristics of Nurses

Nurses, as a group, have been studied by both sociologists and psychologists in order to isolate personality characteristics specific to the nursing profession. Spaney (1953) conducted one of the earlier personality studies with student nurses. Since that time, many nurses have been studied in an attempt to discover personality traits common to the profession of nursing. These studies, pertinent to professional nurses, can be divided into three categories: (a) those comparing characteristics of student and professional nurses with one another and with normative samples, (b) those comparing specific groups of professional nurses to one another and with normative samples, (c) those comparing graduate and practitioner students with one another and with normative samples.

Students, Registered Nurses, and Normative Groups

Healy and Borg (1951) compared personality traits of 182 student nurses with 78 registered nurses and with 143 members of a normative group. Three personality tests were administered to each group. The first test,

the Guilford Martin Battery, revealed registered nurses (RNs) to be significantly more objective, more agreeable, and cooperative than either the norm group of college women, or the student nurses (Healy & Borg, 1951). The second test, Inventory of Factors (STDCR), revealed that students and registered nurses were significantly more introverted than the college norm group. Registered nurses were more optimistic and cheerful, emotionally stable, and conscientious than either the nursing students or the college norm group (Healy & Borg, 1951). The third test, Inventory of Factors (GAMIN), showed that nursing students were significantly higher than the registered nurses and the college norm group on general pressure for overt activities. Nursing students scored lower than the college norm group on ascendancy and leadership. Registered nurses demonstrated higher self-confidence and less nervousness than either the nursing students or the college norm group (Healy & Borg, 1951).

A similar study was conducted by Levitt, Lubin, and Zuckerman (1962). Using Navran and Staffacher's (1957) data for graduate nurses, Levitt et al. (1962) compared the personality patterns of 212 student nurses,

167 graduate nurses, and 749 college women using the Edwards Personal Preference Schedule (EPPS). Nursing students had lower scores on the variables of autonomy, dominance, and change than did the college norm group. Nursing students were higher on order, abasement, and intraception and were lower than college women on deference and aggression. It was revealed that nursing students and graduate nurses significantly differed on four of the eight variables: graduate nurses had lower scores on abasement and higher scores on deference, order and aggression (Levitt et al., 1962).

Caputo and Hanf (1965) compared the EPPS pattern and the nursing personality. Utilizing previous studies (Edwards, 1959; Gynther & Gertz, 1962; Klett, 1957; Reece, 1961; Williamson, Edmonston, & Stern, in press), Caputo and Hanf (1965) contrasted the above studies with samples of 50 registered nurses, 79 freshman baccalaureate nursing students, and 62 senior baccalaureate nursing students. The results were as follows: the registered nurses showed a significantly higher degree of relationship with all nursing groups; the freshman nursing students showed a significantly higher relationship with all other nursing groups, and also, the freshmen

showed a significant degree of pattern similarity to the group of high school girls and to college women; the senior nursing students showed a significantly higher relationship with one another, and also a highly significant pattern relationship with both high school girls and college women (Caputo & Hanf, 1965).

With Caputo and Hanf's (1965) study, both nursing students and registered nurses were not consistently discriminable from control groups. These findings are in conflict with the results found by Redden and Scales (1961) and Levitt et al. (1962). Redden and Scales observed significant differences in 12 of the 15 needs; Levitt et al. found significant differences in 8 of the 15 EPPS needs. Casella (1968) concurred with Caputo and Hanf (1965) in that Casella's results failed to provide a legitimate basis for discrimination between nursing groups and non-nursing groups.

Professional Nurses

One of the larger areas of study in personality traits of nurses has been the population of professional or practicing nurses (registered nurses). Investigators have compared the personality traits of the nurse to those of college women in order to discover distinctions

that characterize professional nurses. Also, some personality patterns of specialty area nurses have been conducted.

Navran and Stauffacher (1957) conducted one of the earliest studies which compared 196 psychiatric nurses to 749 college women. Utilizing the EPPS, the results of the study showed that the psychiatric group scored significantly higher than the normative sample on the variables, order, deference, endurance, and aggression. The psychiatric group was significantly lower on the variables, autonomy, affiliation, and exhibition (Navran & Stauffacher, 1957). These results supported the hypothesis that there are personality makeup differences between nurses and Edwards' norm group which is called "women-in-general."

Utilizing the previous data from 1957, Navran and Stauffacher (1958) compared psychiatric nurses with 167 general medical and surgical nurses. Results concluded that the medical surgical nurses scored higher on order, deference, and endurance; while scoring lower on affiliation, autonomy, succorance, exhibition, and dominance when compared to the Edwards' normative sample of "women-in-general." Comparison of the scores of the

medical-surgical nurses and the 196 psychiatric nurses revealed significant differences on seven variables, the nature of which suggested strongly that medical-surgical nurses were relatively more work-oriented than patient-oriented (Navran & Stauffacher, 1958).

Lentz and Michaels (1965), in another study of 287 medical and 237 surgical nurses, contrasted and compared their sample to Edwards' (1959) normative group and Navran and Stauffacher's (1958) general medical-surgical nurses. The major hypothesis of Lentz and Michaels' study was that grouping medical and surgical nurses together would obscure dissimilarities between them and that when studied separately they would be found to differ from each other on Edwards' EPPS (Lentz & Michaels, 1965). The results indicated psychiatric nurses were significantly higher than both medical and surgical groups in dominance and intraception. The most significant differences indicated that surgical nurses had higher needs for change and abasement than either the medical or psychiatric nurses.

Lentz and Michaels (1965) described the psychiatric and medical nurses as being more people-minded, while the surgical nurses were more concerned with techniques,

and demonstrated less initiative than the other two groups. These studies strengthened previous findings in demonstrating distinct personality traits for nurses in specialty areas of nursing.

Mlott (1976) completed a study of psychiatric nurses in contrast to other staff nurses in the following areas: psychiatric, renal dialysis, general surgery, general admitting, and geriatrics. The Minnesota Multiphasic Inventory (MMPI) Life Goals Inventory, Fear Inventory, Dogmatic Scale, and Welsh Anxiety and Repressive Scales were administered to seven groups of eight nurses each. The findings determined that psychiatric nurses had the highest level of ego strength of all groups, and that they possessed adequate ego defenses. The psychiatric nurses exhibited low levels of anxiety, and they were least likely of all the groups to be depressed. Psychiatric nurses were the most extroverted of all the nurses tested, had adequate impulse control, but were extremely relaxed regarding their responsibilities. Psychiatric nurses scored second lowest of all groups compared on the Dogmatism Scale, which indicated that they were nonauthoritarian in asserting their opinions. Other test scores indicated that psychiatric

nurses had their lives under control and were less fearful in general. The Life Goals Inventory revealed that psychiatric nurses strive hardest of all nurses tested for interesting experiences and social service (Mlott, 1976).

In another study involving the psychiatric realm, Perry, Weiss, and Fields (1963) tried to determine if differential attitudes toward patient care existed among psychiatric and nonpsychiatric nursing personnel. Utilizing a general teaching hospital, a sample of 18 participants was drawn from psychiatric and medical and surgical services. The tools employed were the Johnson Attitude Battery, which includes items from three scales; the California F Scale, related to authoritarian attitudes; the Custodial Mental Illness (CMI) Scale, related to custodial attitudes; and the Traditional Family Ideology (TFI) Scale, related to autocratic ideas about the family structure (Perry et al., 1963).

The results concluded that nonpsychiatric personnel (medical, surgical services) tended to be more authoritarian, more custodial, and more autocratic in their attitudes toward patient care than were psychiatric personnel. All nursing personnel studied in the general

hospital tended to be less authoritarian and custodial than the nursing personnel at several psychiatric hospitals (Perry et al., 1963).

George and Stephens (1968) conducted a study of 75 public health nurses using the EPPS. The public health nurses' scores were compared to Navran and Stauffacher's (1958) psychiatric nurses' group ($n = 196$). The public health nurses scored lower on the needs aggression and deference, but scored higher on abasement and autonomy. An additional finding was that public health nurses were high on people-mindedness, a significant trait found in psychiatric nurses. A significant difference in heterosexuality and aggression needs was found between the older (35-59 years) and younger (23-31 years) public health nurses, indicating the possible importance of age in examining EPPS scores (George & Stephens, 1968).

Along the same vein, Stauffacher and Navran (1968) retested their 1957 and 1958 samples and found that 5 years' work experience in nursing resulted in significant differences in EPPS scores. The significant differences were as follows: significantly higher in autonomy and order; significantly lower in change and abasement.

This study contrasted significantly with previous studies done on psychiatric nurses as well as the study

conducted by Cohen et al. (1965), who replicated Navran and Stauffacher's (1957) methodology with a group of 49 psychiatric nurses. The findings of Cohen et al. were identical to Navran and Stauffacher's study needs of order, endurance, and deference, and lower in the needs of autonomy and exhibition. An additional finding was that psychiatric nurses were higher than the normative group in intraception and lower in achievement and succorance (Cohen et al., 1965). While these investigators failed to predict specialty choice on the basis of EPPS scores for all groups, they did record that psychiatric nurses scored higher on the variables intraception.

Graduate and Practitioner Students

After Navran and Stauffacher (1957) began the trend of comparing nurses to other nurses, other investigators joined the effort to determine if specialty area preferences among graduate students and practitioners could be predicted by personality traits. Lukens (1965) studied 101 graduate students in a psychiatric specialty and 137 graduate students in a medical-surgical specialty, in an effort to distinguish personality differences. Lukens utilized six tools: the Stern Activities Index, as a

measure of basic needs; the Poe Inventory of Values, as a measure of general values; the Intraception Scale, as a measure of psychological-mindedness; Sharaf's Self-Depiction Scale, as a measure of willingness to acknowledge socially undesirable feelings; a 10-item F Scale, as a measure of authoritarianism; and an open-ended question, asking for the subjects' perception of the three most attractive features of her specialized field, as a measure of occupational values.

The results of Lukens study concluded that, as a group, the medical-surgical graduate students scores significantly higher on the following: natural science interests, practicalness, applied interests, educability, achievement, intellectual interests, understanding, authoritarianism, and self-deception. The psychiatric graduate students scored significantly higher on the following: emotionality, reflectiveness, and psychological-mindedness (Lukens, 1965). The results of the value orientation tests revealed that medical-surgical graduate students scored higher on religious and humanitarian values. Lukens concluded that the question on work values indicated that the medical-surgical graduate students emphasized background and the technical

knowledge required in their field, while the psychiatric graduate students emphasized the type of work setting and nurse-patient relationships (Lukens, 1965).

Miller (1965) conducted a study in a further attempt to define personality traits among specialty groups of graduate students. The sample consisted of 61 psychiatric, medical-surgical, maternal-child, and public health graduate students. Miller utilized three tools: The California Psychological Inventory (CPI), the Strong Vocational Interest Blank, and a 1-hour interview conducted by a psychologist. During the psychologist's interview, graduate students were rated on behavior, 15 personality traits, a character sketch, and the California Q-Sort (Miller, 1965).

The compiled test results of Miller revealed distinct personality traits for each specialty area. Medical-surgical graduate students were characterized as passive; more dependent; sincere; conscientious; judgmental of others; social values and attitudes; and generally overly conforming and conventional in most situations (Miller, 1965). The psychiatric graduate students were characterized as being rebellious toward rules and restrictions, having broad interests similar

to creative people, extremely independent, and pre-occupied with social conflicts (Miller, 1965). Public health and maternal-child health graduate students were categorized as cheerful, warm people with a high degree of insight and easily accepted by others. Distinguishing traits of the public health graduate students were order, efficiency, and promptness. The maternal-child health graduate students were distinguished as having a gentle manner, feminine interests, and a slow, relaxed tempo of living (Miller, 1965).

Chater (1967) administered the Omnibus Personality Inventory (OPI) to a sample of 103 graduate nursing students from the same university used in Miller's (1965) study. The four groups of graduate students according to clinical specialty were: maternal-child health, medical-surgical, psychiatric, and public health. The tools utilized by Chater measured three categories of personality attributes: intellectual disposition, ego development, and social relationships. Again, the results revealed medical-surgical and maternal-child graduate students to be more dependent and conventional, whereas the psychiatric and public health graduate students were characterized by greater independence and

autonomy. Psychiatric graduate students had the highest scores on measures of intellectual disposition, while maternal-child graduate students received the lowest scores (Chater, 1967). In addition, both psychiatric and maternal-child groups appeared to be more socially oriented than the medical-surgical and public health group.

In the area of personality patterns of practitioner students, O'Hara-Devereaux, Brown, Mentink, and Morgan (1978) studied the biographical data, personality, and vocational interests of 63 family nurse practitioners. The tools utilized by O'Hara-Devereaux et al. (1978) were as follows: the Strong Vocational Interest Blank, the Omnibus Personality Inventory, Cattell's 16 Personality Factor (16 PF) Questionnaire, and the Myers-Briggs Type Indicator. The results on the first test revealed that family nurse practitioners (FNPs) displayed greater interest in social service and health-related services. On the second test, the FNPs tended to score high in the areas of personal integration, autonomy, and altruism, but displayed a high anxiety level. The third test characterized FNPs as reserved, emotionally stable, serious, trusting, imaginative, and self-assured.

In the fourth test, the FNPs indicated only one area of strong preference; that of making judgments or decisions through feelings rather than thinking (O'Hara-Devereaux et al., 1978).

In a second study in the practitioner area by Burns et al. (1978), the results of the EPPS were used to compare 125 pediatric nurse practitioner students to the Edwards college sample, and to a group of psychiatric nurses previously studied. The pediatric nurse practitioner students were found to have higher achievement needs both before and after training than either the Edwards female college group or the psychiatric nurses (Burns et al., 1978). The pediatric nurse practitioners were also lower than the psychiatric nurses on order and endurance both pre-training and post-training, but higher on endurance than the Edwards group pre-training, with no difference existing after training. The pediatric nurse practitioner students had significantly higher scores on aggression, dominance, and autonomy than the psychiatric nurses pre-training and post-training, with the exception of a lower dominance score after training (Burns et al., 1978).

In comparison with the Edwards group on these factors, pediatric nurse practitioner students were

higher on aggression pre-training and post-training, higher on autonomy after the program, and lower in dominance after the program. In addition pediatric nurse practitioner students were significantly lower than the Edwards group and the psychiatric nurses on deference and abasement needs both before and after the program (Burns et al., 1978). The pediatric nurse practitioner students were higher on succorance needs than the psychiatric nurses after training which may have been associated with the transition from student to professional. During training, there was a significant decrease in order and endurance, the needs associated with low flexibility (Burns et al., 1978).

In another study of pediatric nurse practitioner students, with a sample of 118, Bruhn et al. (1978) utilized a pretest and posttest format with three personality tests: Rotter's Internal-External (I-E) Locus of Control Scale, Budner's Intolerance of Ambiguity Scale, and the Myers-Briggs Type Indicator. Bruhn et al. divided the pediatric nurse practitioner students into 67 applicants currently enrolled and 43 graduates from the program. Results indicated that no significant statistical differences existed between enrolled and

graduates on the I-E, or on the Intolerance of Ambiguity Scale. However, the two groups differed on the Myers-Briggs test. A larger percentage of the 67 enrolled applicants had a judging (J) attitude and were introverted compared to the graduates (Bruhn et al., 1978).

With respect to the change during training, the students demonstrated more external control at the end of the program than upon entry. In addition, on the Myers-Briggs test, the pediatric nurse practitioner students were significantly less judging and more perceptive in attitude at the end of the program than upon entry. With respect to the changes following graduation (a 1-year interval), the pediatric nurse practitioners had almost identical I-E scores on their entry scores. In addition, the pediatric nurse practitioners became more intolerant of ambiguity after 1 year in a job than they were at graduation (Bruhn et al., 1978). The preceding practitioner studies would seem to indicate that the attitudes and personality traits of students change somewhat during the learning of a new role.

Summary

This chapter has reviewed research pertaining to the categories of personality and the personality

characteristics of nurses. Of the research studies that dealt with personality characteristics of nurses, the results indicated nurses to be more orderly and deferent than normative samples. Other personality traits which differed among nursing populations were related to their fields of clinical practice. Studies which compared graduate students of various clinical specialties also revealed personality differences. Practitioner studies indicated a change during training in personality traits. Although research on personality characteristics of nurses has been extensive, no research on personality characteristics of operating room nurses was found upon reviewing the literature.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A descriptive study was conducted to determine if the identified need hierarchies differed between operating room (OR) nurses and surgical staff nurses. This study also sought to determine if age and years of experience become significant factors in the personality need hierarchies of operating room and surgical staff nurses. According to Polit and Hungler (1978), a descriptive study observes, describes, and, perhaps, classifies data.

Setting

The study was conducted in two, large, metropolitan, Southwestern cities. There were three hospitals utilized to obtain the samples of two groups of nurses. The first institution was a private, nonprofit hospital with 615 beds. There were two general, surgical units in the hospital which employed 24 registered nurses. The operating room setting consisted of 15 operating suites where elective and nonelective operations were performed. These suites employed 26 registered nurses.

The second institution was a city-county, non-profit hospital with 328 beds. There were three general surgical units in the hospital employing 21 registered nurses. The OR consisted of 10 operating suites where elective and nonelective operations were performed and employed 17 registered nurses. The third institution was a private, nonprofit hospital with 305 beds. There were two general surgical units in the hospital employing 24 registered nurses. The OR consisted of eight operating suites which employed 14 registered nurses. Both elective and nonelective surgery is performed in these operating suites.

Population and Sample

The target population for this study was all surgical and operating room registered nurses employed full-time in the agencies described as the study setting. The sample was registered nurses employed full-time on surgical units and in the operating room at the time of the study, and who were willing to participate in the study. The sample was one of convenience, as all willing, eligible subjects on surgical units and in the OR were included in the study. Nineteen registered nurses were

included in the surgical staff nurse group and 19 registered nurses were included in the OR nurse group.

Protection of Human Subjects

This study was classified under Category I of the Procedure and Considerations for Obtaining Permission to Conduct a Research Study Involving Human Subjects for Texas Woman's University and did not necessitate Human Subjects Committee review (Appendix A). Written permission was obtained from the three agencies (Appendix B) and from the graduate school (Appendix C). An informed consent statement was placed at the top of the demographic data sheet. The statement read as follows: COMPLETION AND RETURN OF THIS INSTRUMENT AND THE TEST SCORE SHEET WILL CONSTITUTE YOUR AGREEMENT TO PARTICIPATE IN THIS STUDY.

The risks of this study were minimal and not greater than those risks encountered in daily life. The more obvious risk was that of psychological discomfort, either because of taking a test or being involved in a research study.

Anonymity was provided as no names were recorded on test packets or demographic data sheets. The list of names obtained from the nursing service roster was

destroyed by the investigator after distribution of test packets. Confidentiality was provided by use of a sealed box used for return of the completed tests.

Instruments

The Edwards Personal Preference Schedule (EPPS) (Appendix D) is an inventory of 225 forced choice paired comparisons (i.e., the subject has to choose between paired statements of equal overall desirability) designed to show the relative importance with the individual of 15 key needs/motives. The schedule is carefully constructed to minimize the natural tendency of examinees to choose face-saving or socially desirable responses. The EPPS is based upon Murray and Kluckhohn's (1953) concepts of comparative psychological needs as they may vary among normally functioning people. The variables which the EPPS investigate are as follows:

- (1) Achievement: To accomplish something different; to be a success; to do one's best.
- (2) Deference: To respect superiors; to accept leadership; to conform to custom.
- (3) To like order: To aim for perfection in detail; to have things planned and organized.
- (4) Exhibition: To be the center of attention; to make an impression; to have an audience.
- (5) Autonomy: To be free to do what you want; to defy convention; to be critical of authority.

(6) Affiliation: To please and win affection; to be loyal to friends; to form strong attachments.

(7) Intraception: To be introspective; to be interested in motives and feelings; to analyze the behavior of others.

(8) Succorance: To desire sympathy; to want encouragement; to have others interested in your problems.

(9) Dominance: To dominate others; to be a leader; to influence others to make decisions.

(10) Abasement: To feel inferior; to feel guilty; to feel timid; to withdraw from unpleasant situations.

(11) Nurturance: To sympathize with others; to be generous with others; to encourage others.

(12) Change: To try new and different things; to like to travel; to experience novelty and change.

(13) Endurance: To persist; to keep at a task until it is finished; to put in long hours of uninterrupted work.

(14) Heterosexuality: To enjoy heterosexual activities; to be interested in the opposite sex.

(15) Aggression: To criticize others publicly; to tell others what one thinks of them; to become angry. (Edwards, 1959, p. 19)

The Edwards test norms were established on the basis of average scores obtained from a sample of 749 women and 760 college men, all of whom were enrolled in liberal arts colleges at the time of testing.

Lake, Miles, and Earles (1973) stated that the internal consistency reliabilities on the EPPS range from .60 to .87 with a median of .78; item overlap, however, inflates these estimates. As to content validity, no evidence was presented which demonstrated the comparability of items measuring a particular need.

Anastasi (1976) stated that it is important to bear in mind that the EPPS employed ipsative scores-- that is, the strength of each need is expressed, not in absolute terms, but in relation to the strength of the individual's other needs. Because of their ipsative nature, the conversion of EPPS scores to normative percentiles may be questioned. Anastasi further concluded that although the EPPS introduced several noteworthy features, it is in need of the following: (a) revision to eliminate certain technical weaknesses, particularly with regard to item form and score interpretation; and (b) properly conducted validation studies utilizing techniques of score patterns analysis appropriate to ipsative scores.

Inter-correlations of the variables measured by the EPPS were computed separately for two different groups and the results reported in the manual (Edwards, 1959). The results supported the idea that the variables measured by the EPPS were relatively independent.

Lake et al. (1973) contended that the validity data in the manual were sparse. The EPPS has received considerable criticism for its insufficient validation, to which Edwards, in his revised manual, has not replied.

The implications of the ipsative nature of the scores have not been investigated.

Anastasi (1976) stated that the retest reliabilities of the 15 scales reported in the manual range from .74 to .88, split-half reliabilities range from .60 to .87. However, both sets of values may be somewhat inflated; the first, through recall of responses over the short interval employed (1 week); the second, because of the repetition of identical statements, 3 to 4 times in different pairs with each scale.

Each of the 15 personality variables of the EPPS is paired twice with every other variable, requiring each statement to be repeated 3 to 4 times. There are 210 choices to be made and the respondent can endorse each variable related statement from 0 to 28 times. The strength of a particular variable is determined by the number of times, of the 28 options, that each variable statement is endorsed. A reference of norms is available in Edwards' (1959) manual to cross reference whether the respondent's score on a given variable, within the range of 0 to 28, is high or low. A raw score is computed for each of the 15 personality variables. Some of the studies which utilized the EPPS

were as follows: Adams and Klein (1970), Bailey and Claus (1969), Caputo and Hanf (1965), Casella (1968), Cohen et al. (1965), Gynther and Gertz (1962), Lentz and Michaels (1965), Levitt et al. (1962), Miller (1965), Navran and Stauffacher (1957, 1958), Peitchinis (1972), Redden and Scales (1961), Reece (1961), Schultz (1965), and Stein (1969a, 1969b).

The Demographic Data Sheet (Appendix E) was developed by the investigator for use in this study. Information requested on the Demographic Data Sheet was that of age, sex, years in nursing, basic nursing education, specialty area, and years in specialty area. Data were used to describe the sample.

Data Collection

Permission to conduct the study was obtained from the participating agencies and from the graduate school. The appropriate administrative personnel were approached to solicit the names from the nursing service roster of those surgical staff nurses who were eligible and who met the criteria. The surgical staff nurses were approached individually to explain the purposes of the study and to elicit cooperation for participation in the study.

Operating room nurses were approached as a group to enlist participation in the study and to explain the details of the study. Surgical and OR nurses who were eligible and willing to participate were given a copy of the EPPS with the answer sheet and a copy of the Demographic Data Sheet. The instructions for completion of the articles were explained by the investigator as well as included in an instruction sheet (Appendix F). Subjects were informed that a completed, returned test score sheet and completed demographic data sheet constituted informed consent to participate in the study. This process was repeated at all three hospitals until the sample was obtained.

Treatment of Data

Parametric statistical analysis were used to interpret the data gathered on the EPPS. The mean, standard deviation, and t-test were computed on each of the 15 personality variables of the EPPS for each group of norms. A two-tailed t-test was utilized at the .05 level of significance to denote statistical significance of each personality variable. Information obtained from the Demographic Data Sheet was used for descriptive purposes

through frequency distributions and percentages. The significant factors of age and years in nursing was compared through the use of analysis of variance.

CHAPTER 4

ANALYSIS OF DATA

A descriptive study was conducted to determine if personality need hierarchies differed when comparing operating room nurses and surgical staff nurses. In addition, age and years of experience in nursing were analyzed for significance in the ranking of the need hierarchies.

Description of Sample

The sample was composed of 38 registered nurses. Nineteen of the nurses were operating room nurses and 19 were surgical staff nurses. Demographic information was categorized using frequency distributions and percentages. Demographic information elicited from the participants consisted of age, sex, number of years employed full-time in nursing, basic nursing education, specialty area, and the number of years employed in the specialty area. Table 1 presents the age group with the number and percentage of participants. In the operating room (OR) group, 1 registered nurse (5.6%) was between the ages of 20 to 25, 4 (22.2%) nurses were between the ages of

Table 1

Age Group of Participants
(n = 38)

Age Group (Years)	Operating Room Nurses ^a		Surgical Staff Nurses ^b		Total	
	Number	Percent	Number	Percent	Number	Percent
20-25	1	5.6	0	0	1	3.0
26-30	4	22.2	3	20.0	7	21.2
31-35	7	38.9	5	33.3	12	36.4
36-40	3	16.7	2	13.3	5	15.2
Over 40	3	16.7	5	33.3	8	24.2
Totals	18		15		33	100.0

^aOne Operating Room Nurse failed to return a completed demographic data sheet.

^bFour Surgical Staff Nurses failed to return a completed demographic data sheet.

26 and 30, 7 (38.9%) nurses were between the ages of 31 and 35, 3 (16.7%) nurses were between the ages of 36 and 40, and 3 (16.7%) nurses were over 40 years of age. In contrast, in the surgical staff group, there were no registered nurses between the ages of 20 and 25, 3 (20.1%) were between the ages of 26 and 30, 5 (33.3%) were between the ages of 31 and 35, 2 (13.3%) were between the ages of 36 and 40, and 5 (33.3%) were over 40 years of age. All of the participants were female.

Table 2 presents the range, frequency, and percentages of the number of years employed full-time in nursing for the OR and surgical staff groups. In the OR group, 2 (11.1%) registered nurses had been employed between 0 and 3 years, 7 (38.9%) had been employed between 4 and 6 years, 3 (16.7%) had been employed between 7 and 10 years, and 6 (33.3%) had been employed over 10 years. In contrast, in the surgical staff group, 1 registered nurse (6.7%) had been employed between 0 and 3 years, 3 (20.0%) had been employed between 4 and 6 years, 3 (20.0%) had been employed between 7 and 10 years, and 8 (53.5%) had been employed over 10 years.

Table 2

Years in Nursing
($\underline{n} = 38$)

Years In Nursing	Operating Room Nurses ^a		Surgical Staff Nurses ^b		Total	
	Number	Percent	Number	Percent	Number	Percent
0-3	2	11.1	1	6.7	3	9.1
4-6	7	38.9	3	20.0	10	30.3
7-10	3	16.7	3	20.0	6	18.2
Over 10	6	33.3	8	53.3	14	42.4
Totals	18		15		33	100.0

^aOne Operating Room Nurse failed to return a completed demographic data sheet.

^bFour Surgical Staff Nurses failed to return a completed demographic data sheet.

Table 3 represents the frequency and percentages of the types of basic nursing education obtained by the OR and surgical staff groups. In the OR group, 4 (22.2%) registered nurses graduated from an associate degree program, 9 (50.0%) graduated from a diploma program, and 5 (27.8%) graduated from a baccalaureate program. In contrast, in the surgical staff group, 5 (33.3%) registered nurses graduated from an associate degree program, 3 (53.3%) graduated from a diploma program, and 2 (13.4%) graduated from a baccalaureate program.

Table 4 represents the range, frequency, and percentages of the number of years employed in the specialty area for the OR and surgical staff groups. In the OR group, 7 (38.9%) registered nurses had been in the area between 0 and 3 years, 4 (22.2%) had been in the area between 4 and 6 years, 3 (16.7%) had been in the area between 7 and 10 years, and 4 (22.2%) had been in the area over 10 years. In contrast, in the surgical staff group, 2 (13.3%) registered nurses had been in the area between 0 and 3 years, 2 (13.3%) had been in the area between 4 and 6 years, 7 (46.7%) had been in the area between 7 and 10 years, and 4 (26.7%) had been in the area over 10 years.

Table 3

Basic Nursing Education
($\underline{n} = 38$)

Type of Program	Operating Room Nurses ^a		Surgical Staff Nurses ^b		Total	
	Number	Percent	Number	Percent	Number	Percent
Associate Degree	4	22.2	5	33.3	9	27.3
Diploma	9	50.0	8	53.3	17	51.5
Bachelor of Science in Nursing	5	27.8	2	13.4	7	21.2
Totals	18		15		33	100.0

^aOne Operating Room Nurse failed to return a completed demographic data sheet.

^bFour Surgical Staff Nurses failed to return a completed demographic data sheet.

Table 4

Years in Specialty Area
($n = 38$)

Years in Specialty Area	^a Operating Room Nurses		^b Surgical Staff Nurses		Total	
	Number	Percent	Number	Percent	Number	Percent
0-3	7	38.9	2	13.3	9	27.3
4-6	4	22.2	2	13.3	6	18.2
7-10	3	16.7	7	46.7	10	30.3
Over 10	4	22.2	4	26.7	8	24.2
Totals	18		15		33	100.0

^aOne Operating Room Nurse failed to return a completed demographic data sheet.

^bFour Surgical Staff Nurses failed to return a completed demographic data sheet.

Findings

Research Question 1 stated: What are the need hierarchies of operating room nurses and surgical staff nurses as measured by the Edwards Personal Preference Schedule (EPPS)? The rank order of the need hierarchies of the operating room nurses may be found in Table 5. The rank order of the need hierarchies of the operating room nurses was as follows: endurance, nurturance, deference, achievement, intraception, succorance, heterosexuality, aggression, change, dominance, autonomy, abasement, affiliation, order, and exhibition. The rank order of the surgical staff nurses may be found in Table 6. In contrast, the rank order of the need hierarchies of the surgical staff nurses was as follows: nurturance, endurance, deference, achievement, intraception, heterosexuality, abasement, succorance, autonomy, aggression, dominance, exhibition, order, change, and affiliation.

Research Question 2 stated: What are the differences and similarities of personality characteristics between operating room nurses and surgical staff nurses. Table 7 represents analysis of hierarchy of mean scores utilizing the t-test at the .05 level of significance. The only statistically significant difference found between the

Table 5
 Rank Order of Need Hierarchies
 of Operating Room Nurses
 (\underline{n} = 19)

Rank Order	Need Hierarchy	Mean*
1	Endurance	15.84
2	Nurturance	15.00
3	Deference	14.84
5.5	Achievement	14.63
5.5	Intraception	14.63
5.5	Succorance	14.63
5.5	Heterosexuality	14.63
8	Aggression	14.53
9	Change	14.42
10	Dominance	13.95
11	Autonomy	13.89
12	Abasement	13.79
13	Affiliation	12.74
14	Order	12.58
15	Exhibition	12.00

*Range 0-28 (Low to High).

Table 6
 Rank Order of Need Hierarchies
 of Surgical Staff Nurses
 (n = 19)

Rank Order	Need Hierarchy	Mean*
1	Nurturance	16.16
2	Endurance	15.84
3	Deference	15.53
4	Achievement	15.37
5	Intraception	15.16
6	Heterosexuality	14.95
7	Abasement	14.42
8	Succorance	14.37
9	Autonomy	13.74
10	Aggression	13.47
11	Dominance	13.32
12	Exhibition	12.89
13	Order	12.84
14	Change	12.68
15	Affiliation	12.37

*Range 0-28 (Low to High).

Table 7
Analysis of Hierarchy Mean Scores

Personality Variable	Operating Room Nurses		Surgical Staff Nurses		t	p
	Mean	Standard Deviation	Mean	Standard Deviation		
Achievement	14.63	2.73	15.37	2.06	0.94	.354
Deference	14.84	2.32	15.53	2.17	0.90	.354
Order	12.58	2.69	12.84	2.46	0.31	.755
Exhibition	12.00	1.94	12.89	2.31	1.29	.204
Autonomy	13.89	2.05	13.74	1.49	0.27	.787
Affiliation	12.74	2.98	12.37	2.71	0.40	.693
Intracception	14.63	2.57	15.16	2.59	0.63	.533
Succorance	14.63	2.48	14.37	2.41	0.33	.742
Dominance	13.95	2.90	13.32	2.10	0.77	.445
Abasement	13.79	2.32	14.42	2.24	0.85	.400
Nurturance	15.00	3.06	16.16	2.22	1.34	.190
Change	14.42	2.84	12.68	2.11	2.14	.039*
Endurance	15.84	2.89	15.84	2.46	0.06	.952
Heterosexuality	14.63	2.34	14.95	2.07	0.44	.662
Aggression	14.53	1.84	13.47	1.61	1.88	.069

*Significant at the .05 level.

mean scores of the two groups of nurses was on the variable change, $t(38) = 2.14$, $p = .039$. The only other variable approaching statistical significance was aggression, $t(38) = 1.88$, $p = .069$. According to the rank order of the need hierarchies, the two groups of nurses differed on 12 of the 15 personality variables.

Both groups of nurses identified endurance and nurturance as the first two ranking needs, with the OR group ranking endurance first and nurturance second, and the surgical staff group reversing this ranking. Deference, achievement, and intraception were ranked third, fourth, and fifth respectively by both groups of nurses. In addition, the OR group and the surgical staff groups had identical mean scores for the variable endurance. The OR group compiled four identical mean scores on the variables achievement, intraception, succorance, and heterosexuality.

Research Question 3 stated: Is age a significant factor in the ranking of the need hierarchies of operating room nurses and surgical staff nurses? An analysis of variance (Table 3) was utilized to analyze the mean scores of the ranking of the total groups' need

Table 8

Analysis of Variance of Operating Room and Surgical Staff
Nurses in the Ranking of the Need Hierarchies According
to the Factor Age with Nurturance
($n = 38$)

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between groups	4	76.9039	19.2260	3.723	.015
Within groups	<u>28</u>	<u>144.6113</u>	5.1647		
Totals	32	221.5151			

hierarchies according to the factor of age. The only significant difference at the .05 level of significance found in the need hierarchies according to age was that of nurturance, $F(4, 28) = 3.723$, $p = .015$. A visual examination of the data revealed that the over 40 years of age group had the highest mean.

Research Question 4 stated: Do years of experience become a significant factor in determining need hierarchies of operating room nurses and surgical staff nurses? Analysis of variance was utilized to analyze the mean scores of the ranking of the total groups' need hierarchies according to the factor of years. There were no significant differences at the .05 level of significance found in the need hierarchies according to years of experience.

Summary of Findings

Based on the analysis of data, 12 of the 15 personality variables were ranked differently by the operating room and surgical staff nurses. One significant difference found in the mean scores of the need hierarchies of the two groups of nurses at the .05 level of significance was on the variable change. Age

was found to have a significant effect on one variable, nurturance, at the .05 level of significance. Years of experience in nursing were found to have no significant effect on the need hierarchies. The two groups of nurses were identical in the ranking of three variables, deference, achievement, and intraception. The mean scores on the variable endurance were identical for the two groups of nurses.

CHAPTER 5

SUMMARY OF THE STUDY

A descriptive study was conducted to determine if personality need hierarchies differed when comparing operating room nurses and surgical staff nurses. In addition, age and years of experience in nursing were analyzed for significance in the ranking of the need hierarchies. Four research questions were proposed:

1. What are the need hierarchies of operating room nurses and surgical staff nurses as measured by the Edwards Personal Preference Schedule (EPPS)?
2. What are the differences and similarities of personality characteristics between operating room nurses and surgical staff nurses?
3. Is age a significant factor in the ranking of the need hierarchies of operating room nurses and surgical staff nurses?
4. Do years of experience become a significant factor in determining need hierarchies of operating room nurses and surgical staff nurses?

Summary

Holland's (1966) theory of vocational choice of personality types or patterns was used as the conceptual framework for this study. The theory is primarily concerned with occupational choices, but also is concerned with personal development and personality. The literature reviewed consisted of theories of trait personality and the personality characteristics of nurses in specialty areas. The majority of studies supported the implication that there are differences in the personality characteristics of specialty area nurses.

The present study was conducted in three hospitals located within a 100 mile radius of one another. The population for this study consisted of operating room and surgical staff nurses. The sample was selected by a convenience sampling technique. Nineteen operating room nurses and 19 surgical staff nurses volunteered to participate in the study. The instrument used in the present study was the Edwards Personal Preference Schedule and a Demographic Data Sheet developed by the investigator.

Treatment of the data was done by use of the two-tailed t-test and analysis of variance. The two-tailed

t-test was used to determine the differences of the personality characteristics between operating room nurses and surgical staff nurses. The analysis of variance was used to determine the significance of the factors age and years of experience on the ranking of the need hierarchies.

Discussion of Findings

Analysis of the data revealed differences in the rank order of the need hierarchies between operating room nurses and surgical staff nurses on 12 of the 15 personality variables. In comparing this investigation's results with previous research studies no similarities in the ranking of need hierarchies were found.

The results of the present investigation indicated similarities between the two groups of nurses in the rank order of the need hierarchies of deference, achievement, and intraception. There were no studies in the review of literature which reported identical findings.

Analysis of the significance on the factor of age revealed one statistically significant difference on the variable nurturance. This was consistent with the findings of Navran and Stauffacher (1957) who

recorded a statistically significant difference in age on two of the EPPS variables, affiliation and nurturance.

Analysis of the significance on the factor of years of experience revealed no statistically significant difference on the need hierarchies. Years of experience as a factor was not mentioned in any of the previous literature research.

Conclusions and Implications

Analysis of the data showed differences in 12 of the 15 personality variables according to rank order. One statistically significant difference was found between the two groups of nurses on the variable change. This reinforced the implication that there are differences in the personality characteristics of specialty area nurses.

The factor of age upon the significance of the need hierarchies rankings revealed one significant variable, nurturance. Previous literature provided only one instance where age was studied and the variables were affiliation and nurturance. Since most of the review literature did not include demographic data information, no further conclusions are feasible.

The factor of years of experience upon the significance of the need hierarchies rankings revealed no significant differences. The review of literature failed to include demographic data information, therefore no conclusions were feasible.

Recommendations for Further Study

Based on the findings of this descriptive study, the following recommendations were formulated:

1. The instrument utilized for this study should be utilized in more studies to test the validity in determining the personality characteristics of nurses.

2. Perhaps a different or more sensitive personality inventory should be utilized to distinguish differences between specialty area nurses.

3. Conduct research studies in other specialty areas in nursing to determine whether certain personality characteristics are associated with the choice of these areas.

4. The study should be replicated with a larger sample size.

APPENDIX A

Prospectus for Thesis
Approval Form

This proposal for a thesis by Linda F. Southerland
_____ and entitled Personality Characteristics
in Operating Room and Surgical Staff Nurses

_____ has been successfully defended and approved by the members
of the Thesis Committee.

This research is xx is not _____ exempt from approval
by the Human Subjects Review Committee. If the research
is exempt, the reason for its exemption is: This study is
classified under Category I of the Procedure and Considera-
tions for Obtaining Permission to Conduct a Research Study
Involving Human Subjects for Texas Woman's University and
is characterized under Section F., and involves minimal
risk to the participants.

Thesis Committee: Gail Watson, Chairperson

Sandra Stukel Member

Rose M. Nussimberg Member

Date: 6/23/82

_____ Dean, College of Nursing

Date: _____

APPENDIX B

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Medical Center Hospital

GRANTS TO Linda Southerland
a student enrolled in a program of nursing leading to a
Master's Degree at Texas Woman's University, the privilege
of its facilities in order to study the following problem.

Personality Characteristics of Operating Room
and Surgical Staff Nurses

The conditions mutually agreed upon are as follows:

1. The agency (may) (~~may not~~) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (wants) (~~does not want~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: 21 Sept 83 Linda C. Keeling, V.P. Nursing Services
Signature of Agency Personnel
Linda F. Southerland Gail Watson
Signature of Student Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU
College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

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The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (~~may~~) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other We would like a copy upon completion.

Date: 14 Sept 82

Linda Southerland
Signature of Student

Signature of Agency Personnel

Gail Watson
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
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College of Nursing.

TEXAS WOMAN'S UNIVERSITY
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2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other: - requests a copy of
the completed thesis or a summary of
findings.

Date: _____

Linda F. Southerland
Signature of Student

Signature of Agency Personnel

Dr. Eric Watson
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU
College of Nursing.

APPENDIX C



Texas Woman's University

P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757, Tex-An 834-2133


THE GRADUATE SCHOOL

Ms. Linda F. Southerland
Route 1, Box 209
Hawkins, TX 75765

Dear Ms. Southerland:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,


Robert S. Pawlowski
Provost

ap

cc Ms. Gail Watson
Dr. Anne Gudmundsen

APPENDIX D

Edwards Personal Preference Schedule (EPPS)

This copyrighted instrument may be purchased
from the following company:

The Psychological Corporation
New York, New York 10017

APPENDIX E

COMPLETION AND RETURN OF THIS INSTRUMENT WILL BE
CONSTRUED AS INFORMED CONSENT TO PARTICIPATE IN THE
STUDY.

Demographic Data Sheet

Instructions: Please check the appropriate blank.

1. Age: ___ 20-25 ___ 31-35 ___ over 40
 ___ 26-30 ___ 36-40
2. Sex: ___ female ___ male
3. Number of years employed full-time in nursing:
 ___ 0-3 ___ 4-6 ___ 7-10 ___ over 10
4. Basic nursing education:
 ___ A.D. ___ Diploma ___ B.S.N.
5. Specialty area:
 ___ Operating room
 ___ Surgical staff nurse
6. Number of years employed in specialty area:
 ___ 0-3 ___ 4-6 ___ 7-10 ___ over 10

APPENDIX F

Explanation to Subjects

My name is Linda Southerland, R.N., and I am a graduate student at Texas Woman's University. The central theme of my Master's thesis is personality characteristics of nurses working in the operating room and in surgical areas. My purpose is to determine if there are any differences in the personality characteristics of nurses employed in the operating room and surgical areas.

It is vitally important that my sample include as many eligible registered nurses as possible in order that the results may be more representative of registered nurses working in these areas.

If you are willing to participate, please complete the page entitled Demographic Data Sheet in addition to the test score sheet furnished with the test. You may take the test home with you and fill it out at your convenience. It should take about 30-40 minutes to complete. Please complete the test within 5 days after receiving it and drop the test score sheet and the Demographic Data Sheet in the sealed box that will be placed in a convenient location. In the operating room a box will be placed in the nurses' lounge, and

for the floor nurses, a box will be placed in each unit's conference room.

Please do not write your name on any of the sheets that will be returned to me. This will ensure the confidentiality of all information. You are free to withdraw from the study at any time, and for any reason, without affecting your position or employment.

If there are any questions, I can be reached at 214/769-2478.

I deeply appreciate your time and effort in helping me.

Thank you,



Linda Southerland, R.N.

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