

PERSONALITY CHARACTERISTICS OF NURSE RESEARCHERS

A THESIS

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DEDICATION

To Sue and Steve:

You are the virtuosos,
providing accompaniment
for an eternal debutant . . .

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CHAPTER 1

INTRODUCTION

The measurement of personality and the traits or characteristics individuals demonstrate was once considered the exclusive territory of psychology. With the initiation and establishment of the behavioral sciences, it became evident that the topic of personality was gaining societal popularity. As the study of personality evolved numerous profiles were collected on stratified portions of the population. The information derived from these studies was used by employers, educators and counselors in an attempt to determine suitability for available positions and as a counselling mechanism for those seeking specific career goals. Because many instruments used for obtaining personality profiles have been validated, it seems appropriate for nursing to employ such profiles in the same manner as the business, education and counseling professions. However, a baseline profile must be established in order to use these instruments in a reliably predictive manner.

Problem Statement

Numerous personality profiles of registered professional nurses and nursing students have been

constructed (Bruhn, Floyd, & Bunce, 1978; Buhmeyer & Johnson, 1977; Lewis & Cooper, 1976). Similar to other professions, information obtained in these research studies has been used to determine suitability for practice (Burns, Lapine, & Andrews, 1978; Gardiner, 1976; Reeve, 1978) and potential for success as an educational candidate (Buhmeyer & Johnson, 1977; Burton, 1972; Cooper, Lewis, & Moores, 1976). These profiles have also been used as counseling tools to increase the probability of a candidate's retention within the profession (Bruhn et al., 1978; Devereaux, Braun, Mentink, & Morgan, 1978; Jones, 1975). Additionally, studies have been performed to obtain the personality profiles of nurses who function as administrators (Cooper et al., 1976; Lewis & Cooper, 1976), educators (Numerof, 1978; Watson, 1978), and practitioners (Gilbert, 1975; Webb & Herman, 1978; White, 1975). Although these studies provide a plethora of information about nurses, a deficit exists in relation to those individuals who perform research. Therefore, the purpose of this study was to attempt to answer the following questions:

1. What are the personality characteristics of nurse researchers?
2. Is there any similarity among the personality characteristics of nurse researchers?

Justification

Research is a relatively recent activity within the nursing profession. Gortner and Nahm (1977) reported that only since World War I have strenuous efforts been made toward developing research in nursing. Bryan (1932) addressed the need for research to move nursing from the artistic to the scientific realm. Henderson (1956) alluded to the necessity for nurses to investigate themselves and their own purpose before pursuing the investigation of phenomena they experience. Abdellah (1968) in a report to the American Nurses' Association (ANA) cited the necessity for at least 1% of the active nurse population to perform research. Although the number of nurses conducting research and the number of studies performed has increased since Abdellah's report, there remains an insufficient amount of data regarding the dynamic nurse population and the scope of nursing practice (Andreoli, 1977).

Numerous reasons have been cited for the apparent paucity of research. Financial and practice limitations (deTornyay, 1977; Hodgman, 1978), as well as ethical requirements and lack of professional recognition (Lysaught, Christ, & Hagopin, 1978), have been attributed to the small number of studies performed by nurses.

Martinson (1976) identified from a review of the literature additional factors responsible for the apparent

lack of research in nursing. These factors included timidity, hesitancy, and low self-esteem. Since personality characteristics of nurse researchers have not been obtained, these claims remain empirical. Furthermore, because no nurse researcher profiles are available, determination of suitability for the function of research remains, at best, random.

Theoretical Framework

Adlerian psychology is based on Adler's (1938, 1955) theory of personality. This theory denotes that the conviction of an individual is based on self-perception as well as the person's perception regarding the society in which he or she lives. From this conviction further beliefs as well as the method in which an individual operates become evident (Adler, 1955). Therefore individuals will act according to what they view as true (i.e., what coincides with his or her conviction). Hence, the pursuit of a lifestyle, profession and a place in society are commensurate with one's beliefs (Adler, 1938). Adler further noted that the personality of adults is not dictated by their environment, but that the environment that individuals choose is dictated by their personality (Adler, 1938).

Cattell (1965) further developed Adler's theory as it regarded the personality construct. Cattell, Eber, and

Tatsuoka (1970) have documented similarities in the personality characteristics of stratified populations. Furthermore, studies performed previously have correlated personality characteristics with specific nursing functions (Gardiner, 1976; Reeve, 1978). Such information provides additional support for the use of Adler's theoretical framework in relation to studies designed to describe similarities in personality for a specifically defined population. Therefore, analysis of Adler's framework and data provided by Cattell and others enabled the investigator to formulate variables for this study. Specifically, these were identified as personality characteristics and subsequent identification with the role of nurse researcher.

Assumptions

This study was based on the following assumptions:

1. Personality characteristics are measurable phenomena.
2. Personality characteristics may be measured by an objective test.
3. Personality measurement approximates an individual's behavior.
4. There is a similarity in the personality characteristics of stratified populations.

Research Questions

For the purpose of this study the following research questions were asked:

1. What are the personality characteristics of United States resident female nurse researchers?
2. Are there similarities in the personality characteristics of United States resident female nurse researchers?

Definitions

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

1. Characteristic--a distinguishing feature or quality of mind or character (Gilbert, 1975).
2. Nurse Researcher--female members of the American Nurses' Association Council of Nurse Researchers for 1980 who are United States residents (Appendix A).
3. Personality--the totality of distinctive characteristics of an individual (Gilbert, 1975).
4. Personality Characteristics--pertains to the total, overall personality of the individual as measured by the 16 Personality Factors (16PF) (Cattell, Schmidt, & Bjerstedt, 1970).

Limitations

For the purpose of this study the following were considered as limitations:

1. Only members of the ANA Council of Nurse Researchers were included in the sample. Studies have demonstrated that individuals who are members of professional organizations may in fact differ from the underlying population (Redfern, 1978).
2. Only female nurse researchers were considered in this study. Studies have demonstrated a difference in the personality characteristics and motivational characteristics between males and females within the same profession (Hogan, DeSoto, & Solano, 1977).
3. Nurse researchers were given the 16 PF only once. Variation in personality characteristics has been demonstrated when testing the same subjects at different times (Adams & Klein, 1968).
4. Nurse researchers' test responses were based on their ability to understand test instructions.

Summary

The purpose of this descriptive study was two-fold: firstly, to identify the personality characteristics of nurse researchers, and secondly, to compare these characteristics to ascertain similarities. Information obtained

from this study may be used for further prospective or predictive studies in determining suitability or success of nurse researchers.

Chapter 2 includes a review of the literature concerning the role of the nurse in nursing research, the development of a definition for personality, a historical review of personality testing and a review of past studies regarding the personality characteristics of nurses. Chapter 3 consists of a detailed presentation of the methodology used in the study. Chapter 4 contains an analysis of the data which includes an interpretation of statistical analyses. Chapter 5 presents a summary of the study, recapitulates the study methodology, and enumerates implications for the nursing profession. Recommendations for use of the data and for further studies are also included in Chapter 5.

CHAPTER 2

REVIEW OF LITERATURE

This study was designed to determine personality characteristics of nurse researchers and to discern if similarities existed. In order to accomplish these aims, a review of the literature was conducted in the following areas: role of nurses in nursing research, historical development of a definition of personality, testing of personality, and study of the personality characteristics of nurses.

Role of Nurses in Nursing Research

Research has been performed by nurses since the late 1800s (Robb, 1901). However, early studies were primarily composed of systematic observations with little or no attempt to control or manipulate identified variables. Nursing scholars recognized that a more systematic approach to nursing practice had to occur in order to attain a scientific status (Bryan, 1932). Tracy (1947) described this approach to nursing practice in the late 1930s and early 1940s, and Bixler (1950) some years later continued to make an appeal to incorporate the research process into nursing practice. Bixler (1952) again reiterated the

appeal for a more systematic approach to nursing practice and suggested a "think tank" or elite research group approach to the incorporation of the research process in nursing. Contrary to this approach, Henderson (1956) suggested what has become the present day approach to nursing research when she recommended that a clinical rather than experimental approach should be incorporated into nursing practice. She also recommended that trained practitioners rather than investigators, who have limited clinical contact, perform this research.

Abdellah (1968) recognized the necessity for nurses to perform research and reported that at least 1% of the active nurse population should be prepared as nurse researchers. Likewise, Werley (1972) identified the importance of nurses conducting clinical effectiveness evaluation rather than behavioral scientists. Also, Andreoli (1977) recognized problems which nursing practitioners as well as academicians and administrators encounter when attempting to perform research. First and foremost was the lack of adequate funding frequently experienced by nurse investigators (Andreoli, 1977). Similar to Andreoli, Martinson (1976) through her review of the literature documented the obstacles and challenges which nurses face when attempting to perform research. She identified intraprofessional obstacles such as a lack of emphasis on the

research process in nursing education as well as the lack of recognition for nurse researchers.

Margolius, Corns, and Levi (1978) suggested the establishment of research committees to assist nurse educators in implementing the research process. These committees could be used to provide logistical support in the development of research projects and in obtaining research grants. Paletta (1980) continued to document the paucity of available nursing research studies as well as to draw attention to the insufficient number of nurses prepared to perform research.

Batey (1977) suggested a two-fold examination into the problem of a lack of nursing research. The initial step described was to examine the nurse who performs research and the second suggested step was to examine the research itself. Defining and describing the personality characteristics of nurse researchers is congruent with one suggestion of Batey's, that is, describing the nurse who performs research.

Definition of Personality

Allport (1937) reported the existence of approximately 50 definitions for personality. He attributed early origins of the term to the Greeks, possibly Aristotle, with a prominent emergence of the term "persona" in Roman

literature. As time progressed, numerous metaphysical, legal and religious definitions of personality (i.e., person) emerged. Carson (1969) described Kant's use of the term person as a substantial expression of the essence of a human being. This definition was contrasted with Lockes' interpretation of the term which was used in relation to the rights of an individual human being.

Freud is credited with the contemporary interpretation of personality. This interpretation first appeared in personology literature of the late 1800s (Lewin, 1935). Freud (1932) viewed personality as composed of the interactions among the id, ego, and superego.

Unlike Freud's interpretation of personality, Allport (1937) developed his own definition. He distinguished personality as the dynamic organization within the individual of psycho-physical systems that determine his or her unique adjustment to the world.

Using Thorne's (1950) eclectic approach as a framework, Murray (1953) also developed a definition of personality. He stated that there was no single construct or concept that governs personality.

Cattell (1965) identified three historical phases of personality study: the literary phase, the organized observation phase, and the quantitative and experimental

phase. The literary phase was viewed as a "game" of personal insight and conventional beliefs extending from the early history of man to the present day novelist or playwright. Inclusive in this phase are the philosophers and poets of the Renaissance period. During this time personality was viewed as a religious demeanor or political persuasion (Blum, 1953). Although the literary phase served to identify the contribution of personality to behavior or affiliation, it lacked the precision and consistency necessary for the establishment of a science (Cattell, 1965).

The second historical phase identified by Cattell (1965) was the stage of organized observation and theorizing, entitled the protoclinical phase. Individuals such as Jung and Freud were credited with the establishment of a personality paradigm (Allport, 1937). Their observations, documented in a systematic fashion, enabled ensuing investigators to replicate and expand upon their preliminary findings. Cattell (1965) later identified Lewin and Adler as investigators who used the preliminary work of Jung and Freud as a basis for further expansion of the personality paradigm.

The protoclinical phase provided groundwork for the third historical phase, the quantitative and experimental phase. This contemporary phase of personality study is

viewed as a descriptive and measurement stage of paradigms previously documented. Quantification was performed at two levels. First, at a nominal level by identifying the presence or absence of a particular personality characteristic; secondly, at an ordinal level by ranking the relative strength or weakness of that characteristic (Cattell, 1965).

Numerous studies have been performed in which the environment has been manipulated. Concomitant measurement of this manipulation and its effect upon human behavior has been recorded. Also, particular personalities (i.e., persons) have been placed in experimental environments and observations of behavior were recorded. These studies have provided a plethora of information about behavior, as it relates to environment and personality (Hogan, DeSota, & Solano, 1977). Through the information obtained in these studies, conclusions have been drawn that enable investigators to document and quantify personality (Cattell, Schmidt, & Bjerstedt, 1970; Carson, 1969).

Freud's contribution to the development of the construct of personality has been extensively documented. He viewed personality development as a process of identification, object choice and assimilation (Freud, 1932). Simply stated, this process entails an individual's recognition of an object or person and identification with

that object or person. The process of recognition and identification are based upon an underlying deterministic attitude which is developed as a result of past experience. Therefore, according to Freud, an individual's past dictates future activities. Based on his tenets, incorporation or assimilation of the recognized object or person into an individual's personality was the result of past experience rather than free choice.

Jung's (1923) description of personality differed from that of Freud's. Jung stated that if personality was a product rather than a process then behavior would be group dependent. Yet Jung theorized that although groups do have a recognizable behavior pattern, there are also behavioral differences among specific group members. Jung analyzed these differences and surmised that behavior was more than a process of identification, object choice and assimilation as described by Freud. The basic tenets identified by Jung which differed from Freud were that people are guided by their future as well as their past and that human behavior is determined by an ancestral as well as individual past. This departure from Freudian tradition heralded the appearance of different explanations for personality development and behavior.

Lewin (1935) advanced a formula to explain the relationship between individuals' behavior and their

personality. This formula identified a variable that had not been accounted for in previous behavior studies, that of environment. Lewin related the interplay between environment and behavior in the formula: $B = f(P,E)$. He interpreted this formula to mean that a person's behavior in any situation is jointly determined by the environment and the personality. Identification of the variable environment provided groundwork for other theories.

Adler's (1938) interpretation of behavior and personality differed from that of Lewin. Lewin (1935) identified an individual's behavior as situationally dependent, while Adler (1938, 1955) viewed behavior as personality dependent. Adler (1938) proposed that personality dictated the type of environment in which a person behaved rather than occurring because of interaction with the environment. Personality, as viewed by Adler (1955), is determined by preparation for a life goal. Therefore, as soon as the goal of a psychic movement or its life plan has been recognized, then all the movements will coincide with both the goal and the life plan (Adler, 1955). The goal, initially determined by an idea, is derived from an individual's perception of a response to early behavioral activities. This idea is verified first by parental, then later by peer group reinforcement (Adler, 1938). Unlike Lewin, Adler first acknowledged the environment and then recognized that the

behavior was a result of the personality rather than dependent on that environment (Adler, 1955).

Cattell and his associates (1970) expanded Adler's theory in their personality research. This expansion provided documentation of similarities in the personality characteristics of stratified populations. The data obtained from his research studies has enabled Cattell (1972) to support hypotheses regarding personality and environment. Like Adler, Cattell identified personality as the determining factor in the individual's choice of a specific environment. The environment an individual chooses could also refer to a particular career as well as a particular location or milieu. Therefore, career choice according to Cattell would be a result of an individual's personality rather than incidental to the personality.

Personality Testing

The first paper and pencil personality test was developed by Woodward (1919). It was designed to assess the emotional fitness of those enlisting in the United States Army. Although initially it was a widely used instrument, it met with only limited success, and was abandoned by the early 1920s. Whether the test was invalid with regard to its internal construction or incorrectly used by those who gave the test was never ascertained. In

either case, the introduction of personality testing in the United States led to controversy concerning accuracy, which continues to exist today (Hogan, DeSoto, & Solano, 1977).

From 1920 to 1936 Opler (1938) developed a series of instruments designed to measure personality as related to culture. These instruments, like that of Woodward's, were used only briefly. Statistical techniques used in validation of tests were not employed, hence these tests remained largely ignored. However, 10 years later, advancing statistical techniques, as well as an increasing interest in the documentation and quantification of personality characteristics, led to the creation of a vast inventory of personality tests (Hogan et al., 1977).

Individuals such as Eysenck, Edwards, Cattell, and Taylor have contributed to the scientific study of personality. They have developed tests that enable the user to obtain a profile of an individual's personality. Although each of these individuals have made major contributions to the study of personality, Cattell is usually identified as the leading investigator in the measurement of personality characteristics (Hogan et al., 1977; Murray, 1953). He is probably best known for development of the 16 Personality Factors (16 PF) test (Hogan et al., 1977). It was designed in 1949 to measure behavior in terms of 16 distinct

personality factors (Cattell, Eber, & Tatsuka, 1970). The factors were isolated in replicated research studies conducted for more than 30 years. Factor analytic techniques were used to derive 16 source traits, or primary factors. Lewis and Cooper (1976) described the 16 PF as possibly one of the most reliable of any personality tests presently available.

Personality Characteristics of Nurses

Information regarding the personality characteristics of professional nurses first appeared in the psychological literature in 1924 (Hogan et al., 1977). Primarily this information was derived from psychologists' or nursing supervisors' observations of nurses' behavior. In the mid 1930s information about the personality characteristics of nurses was obtained using an adjective list. Later comparison of these lists to observed behavior of individual nurses was done (Miles, 1934). Individual profiles of the nurses were then generated. However, these profiles were generally quite subjective and described only superficial attributes of nurses. Additionally, the lists were not statistically validated and consisted of attributes such as "genuine liking for people," "high grade of intelligence," "understanding," "general education," "broad interests," and "cleanliness" (Miles, 1934).

Content validated lists were used in nursing until the late 1940s when newly developed psychometric tests were implemented. These psychometric tests were then used to develop personality profiles of nurses. The profiles were found to be better predictors of success in nursing school than intelligence quotient (IQ) measures (Petrie & Powell, 1951).

Frequently psychometric tests, such as the Personality Estimates Test (Spaney, 1953), were based on the check lists generated in the late 1930s. Hence, application of these tests often led investigators to erroneous or inconsistent conclusions (Spaney, 1953). Also, statistical techniques employed in personality research during this period were inappropriate. Samples were often chosen from different populations, or nonprobability sampling techniques were employed. Petrie and Powell's (1951) study used a t-test to compare test results collected from five different samples over six months whereas Spaney's (1953) study used purposive sampling techniques with t-testing.

Personality research of the early 1960s began to employ validated psychometric tests. MacAndrew and Elliott (1959) demonstrated that the use of adjective check lists frequently produced varying images of professional nurses when compared to the results of validated psychometric tests.

Reece (1961) used the Edwards Personality Profile Scale (EPPS) to study the personality characteristics of nursing students who voluntarily and involuntarily withdrew from an undergraduate nursing program. He documented differences in select personality characteristics between the two groups. The individuals who voluntarily withdrew possessed significantly higher levels of "achievement," "deference," "autonomy," "endurance," and "dominance" than did the involuntary group. Thurston and Brunclik (1965) suggested the use of the Luther Hospital Sentence Completion Test to predict student achievement in an undergraduate nursing program. They demonstrated a significantly higher "achievement" rating for those individuals who passed the National League of Nursing Pre-nursing Exam than those who failed this exam.

Lukens (1965) reported that graduate nursing students who specialized in medical-surgical nursing possessed different personality characteristics than psychiatric nursing students. Medical-surgical nurses were found to have a higher need for natural science knowledge, practical action, order, organization, and applied interests than did psychiatric nurses.

Mowbray and Taylor (1967) suggested the use of the Kuder Social Service Scale for predicting attrition rates

in schools of nursing. They supported the use of this instrument based on a review of the literature available at that time. Studies reviewed indicated that the higher the "social service interest" the more likely an individual would be to complete a nursing program.

The EPPS and the 16 PF were frequently used instruments in the personality research of the 1960s. Smith (1968) studied personality characteristics of beginning nursing students using the EPPS. His purpose was to establish a personality profile for "typical" freshmen nursing students. A sample of 546 freshmen nursing students, 540 women and 6 men, was used to obtain this profile. Characteristics such as "tender hearted," "intellectual achiever," and "dependent" were documented by this investigator.

Cordiner (1968) also studied personality characteristics of nurses. However, she used the 16 PF to measure personality and compared nursing students in England and the United States. Similarities between students in the two countries were found in relation to "intelligence" and "tender-mindedness." Yet, differences were noted with regard to "outgoingness," "forthrightness," "conscientiousness" and "persistence." Burgess and Duffey (1969), Lukens (1965), Reece (1961), Stauffacher and Navran (1968), and Thurston, Brunclik, and Feldhausen (1969) also studied

personality characteristics of nurses and all used either the 16 PF or EPPS in their investigations.

During the late 1960s and early 1970s, the 16 PF was demonstrated to be a more reliable test for ascertaining personality characteristics of nurses than the EPPS (Adams & Klein, 1970; Gardiner, 1976; Kahn, 1980). Adams and Klein (1970) reported inconsistencies in personality profiles obtained using the EPPS. They compared the results of nursing personality profiles compiled with profiles documented by earlier investigators. This comparison revealed inconsistencies which did not exist with studies performed when the 16 PF was used. Gardiner (1976) and Kahn (1980) reported similar findings and also suggested the use of the 16 PF rather than the EPPS.

Recently, personality research in nursing has been used in diversified areas. Firstly, nursing profiles were used to differentiate the characteristics of nurses who chose subspecialties (Watson, 1978). Secondly, profiles have been employed in a predictive manner to differentiate between potentially successful or unsuccessfully educational candidates (Buhmeyer & Johnson, 1977).

Burton (1972) demonstrated the 16 PF could be used to discriminate between registered nurses who are successful in psychiatric nursing from those who are unsuccessful.

He obtained 103 profiles on a randomly selected sample of registered nurses employed in a psychiatric hospital. Nurse supervisor raters differentiated those who were considered to perform specific tasks satisfactorily from those who performed them unsatisfactorily. The raters were in turn rated for reliability, $\underline{r} = .77$ test-retest and concordance of $\underline{r} = .80$. A high correlation between the prediction of satisfactory performance based on the rater and similarities in personality characteristics of satisfactory and unsatisfactory performers was shown, $\underline{r} = .71$.

Gilbert (1975) obtained personality profiles to determine leadership potential of psychiatric and medical-surgical nurses. Based on randomly chosen samples of 32 medical-surgical and 40 psychiatric graduate nursing students, the California Personality Inventory (Managerial Key) results indicated a greater than average social and intellectual adjustment which was highly correlated with strong leadership qualities for both groups, $\underline{r} = .85$.

Owen and Feldhusen (1970) compared the effectiveness of prediction models for undergraduate nurses with their personality profiles. Findings revealed that there was a correlation, $\underline{r} = .61$, between the cumulative index, specific personality factors and successful completion of an undergraduate nursing program.

Singh (1971) investigated the effect of experimental courses on the personality characteristics of nursing students. In this study the investigator reported that the baseline characteristics of experimental course participants differed from that of nonexperimental course participants. The conclusion drawn from this study was that experimental course participants had a predisposition toward changes normally attributed to the educative process rather than as an effect of this process.

White (1975) recognized the importance in documentation of personality profiles for planning a practitioner program. She suggested that descriptive information about students or applicants could be useful in individualizing programs to target population's needs in order to increase the probability of successful completion.

Ventura (1976) has described differences in the personality characteristics of students enrolled in different education programs. A total of 344 nursing students were randomly chosen from 16 different nursing schools for this study. Subjects' profiles were found to be similar within the same educational experience, baccalaureate, diploma or associate degree programs. However, dissimilarity existed when they were cross-compared (Ventura, 1976).

Although numerous personality profiles have been established for nurses who perform educational, administrative and clinical functions, no profile has been obtained from nurses who perform research (Lewis & Cooper, 1976; Reeve, 1978). Such profiles might be of assistance in planning curricula that would promote the development of nurse researchers as well as nursing research.

Summary

The study of personality has an extensive history ranging from ancient Greece to the present. The scientific observation and documentation of behavior and personality is less than 150 years old and the actual measure of personality characteristics is less than a century old. Personality characteristics have been obtained on individuals and groups, and documentation has been provided indicating similarities of these characteristics within stratified populations. One population from which these characteristics have been obtained is registered nurses. A recent aim of personality research within this population has been to profile registered nurses that participate in specific functions or specialties within the nursing profession. Although nursing research has an extensive history, no personality profiles of nurse researchers have been obtained.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A review of the literature indicated a paucity of information regarding nurse researchers, in particular personality characteristics of nurse researchers. Therefore this descriptive study was designed to determine personality characteristics of nurse researchers. This chapter describes the methodology used for data collection and analysis.

This was a nonexperimental, descriptive study. Polit and Hungler (1978) classified nonexperimental methods as those which do not involve manipulation of an independent variable or do not involve the application of a treatment. Since human behavior is a complex construct, cause and effect relationships are difficult to establish. Hence, a descriptive approach was used in this study in that the aim of descriptive research is to describe the relationship among variables rather than to infer cause and effect (Polit & Hungler, 1978).

Setting

Data for this study were obtained by mailed questionnaires. Therefore, the study settings varied based

on the study subjects' mailing addresses. A mailing list was provided by the ANA Council of Nurse Researchers, and the questionnaires were mailed to these addresses. Therefore, subjects received the questionnaires at their office or home, depending on which location was provided on the list. For the purpose of this investigation, the sample was chosen from residents of the United States only.

Population and Sample

The target population for this study was nurses who are members of the Council of Nurse Researchers. A random sample was chosen from the female United States residents on the mailing list provided by the ANA Council of Nurse Researchers (Appendix A). Findings are considered, therefore, generalizable to female nurse researchers who are residents of the United States and are members of the Council of Nurse Researchers. Mailing labels were alphabetically arranged and then consecutively numbered 1 through 336. A sample of 50 members (15%) of the Council of Nurse Researchers was chosen through the use of the random numbers table.

Protection of Human Subjects

This study was conducted in compliance with the rules and regulations of the Human Research Review Committee at

Texas Woman's University (Appendix A). Specified guidelines were as follows:

1. The subjects were exposed to a minimal amount of inconvenience. Study subjects were contacted only twice. An initial introduction explaining the purpose and intent of this study was made in a letter to each subject (Appendix B). A follow-up letter (Appendix C) was sent only to those participants who did not respond within the time period provided by the investigator.
2. Participation in this study was voluntary.
3. Return of the study forms provided by the investigator was considered voluntary consent to participate in the study.
4. Every effort was made to provide confidentiality for all subjects. Instruments were coded linking the demographic data sheet and 16 PF test form to the mailing addresses of study participants. The purpose of this breach in anonymity was to enable the investigator to send follow-up letters to study participants who did not respond within 14 days of the initial mailing. After follow-up letters were sent, the mailing list was destroyed by this investigator.
5. Subjects were free to withdraw from this study at any time.

Instruments

The instruments used in this study were a demographic data sheet designed by the investigator (Appendix D) and the IPAT 16 PF (Form C) designed by Cattell in 1954. The demographic data sheet was used to obtain descriptive information about study participants and for the purpose of comparative analysis. The data sheet was reviewed by nursing faculty for clarity and completeness.

The 16 PF was developed to measure behavior in terms of 16 distinct personality factors that were derived by factor analytic methods. These factors are listed in Table 1. An additional factor, Motivational Distortion (M.D.), serves as a check for deliberate faking sometimes encountered in personality testing (Cattell, Eber, & Tatsouka, 1970). The M.D. factor serves to further strengthen an area which is considered especially susceptible in personality testing.

The 16 PF is a 105 item paper/pencil test that takes approximately 30 to 40 minutes to complete. Responses appear as either negative, affirmative, or a statement of neutrality. Cattell, Schmidt, and Bjerstedt's (1970) repeated analyses of subjects' responses have indicated 12 primary factors and 4 factors that were built into the internal construction of the test. Factors are composed of source traits rather than measures of surface traits.

Table 1
Summary of Personality Factors Measured by the 16 PF

Personality Factors ^a	
A Sizothymia - Reserved	vs Affectothymia - Warm Hearted
B Less intelligent - Concrete	vs More intelligent - Abstract
C Low ego strength - Changeable	vs High ego strength - Calm
E Submissive - Conforming	vs Dominant - Assertive
F Desurgent - Sober	vs Surgency - Enthusiastic
G Weak superego - Expedient	vs Strong superego - Conscientious
H Threectia - Shy	vs Parmia - Venturesome
I Harria - Tough Minded	vs Premia - Sensitive
L Alaxia - Trusting	vs Protension - Suspicious
M Praxernia - Practical	vs Autia - Imaginative
N Artless - Forthright	vs Shrewd - Insightful
O Untroubled Adequacy - Unperturbed	vs Guilt Proneness - Apprehension
Q1 Conservatism - Tolerant of Tradition	vs Radical Experimenting
Q2 Group Adherence - "Joiner"	vs Self Sufficient - Resourceful
Q3 Low Integration - Careless of Protocol	vs High Self Concept - Controlled
Q4 Low Eridic Tension - Relaxed	vs High Eridic Tension - Tense

^aFrom Cattell, Eber, and Tatsouka, 1970.

Cattell, Schmidt, and Bjerstedt (1970) defined surface traits as those which are dependent upon the immediate state of the individual whereas source traits more accurately approximate the behavior of an individual over an extended period of time (i.e., state versus trait characteristics).

Test-retest reliability on Form C, which was used in this study, has been found to be from $\underline{r} = .67$ to $\underline{r} = .86$ (Cattell, Eber, & Tatsouka, 1970). Items have been considered valid if they continued to have significant validity against the factors after 10 consecutive factor analyses (Cattell, 1972). Cross validation using different samples of test items in correlation with factors on different adult populations was performed. Construct validity by repeated factor analyses has been established at $\underline{r} = .63$ to $\underline{r} = .96$.

Trends in responses are computed and converted to sten scores. A sten is equal to one half of the population standard deviation. The mean raw score has a value of 5.5 stens on the sten scale. Therefore, the raw score of one fourth of a standard deviation below the mean corresponds to a sten score of 5. A range of one standard deviation centered on the mean represents the "average range." Sten scores 1-4 and 7-10 represent a significant deviation from the mean.

Data Collection

Data were obtained from the 16 PF and demographic data sheet that were mailed to randomly selected study participants. A cover letter explaining the purpose of the study as well as instructions necessary for proper completion of the demographic data sheet was enclosed. The 16 PF contained complete instructions on each test booklet.

A follow-up letter was sent to study participants 14 days after the initial letter was mailed if the questionnaires had not been returned. If no response occurred within 10 days after the follow-up letter had been sent, the participant was dropped from the study. An enclosed stamped, self-addressed envelope was provided for study participants to return results.

Treatment of Data

Data derived from this study was treated in the following manner:

Descriptive statistics included appropriate statistics which were used to describe the sample obtained in this study. Ranges and percentages were used in relation to variables obtained from the demographic data sheets. Variables considered for this study were: education, years of employment as a registered nurse and nurse researcher, place of employment, hours per week spent on research

activities, number of professional publications, number of research grants obtained, number of research projects in which study participants had served as primary or principal investigator and personality characteristics as measured by the 16 PF. Means and standard deviations were computed for the variable of age.

Inferential statistics were used to determine if study participants' personality characteristics significantly deviated from the norms documented by Cattell, Eber, and Tatsuoka (1970); a one sample t-test was performed. In order to define significance, a .05 confidence level was addressed.

Multivariate statistics, as classified by Polit and Hungler (1978), are factor analytic methods procedures. The Varimax Factor Analysis procedure was used in the study to determine the existence of similarities in personality characteristics among the sample (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

Summary

This chapter presented methodology for the study. Data obtained through the use of an investigator designed demographic data sheet and Cattell's 16 PF, a description of the population and sampling technique, and statistical methods used for analysis also were described in this chapter.

CHAPTER 4

ANALYSIS OF DATA

This descriptive study was designed to answer the following research questions: (1) What are the personality characteristics of nurse researchers? (2) Are there similarities in the personality characteristics of nurse researchers?

This chapter contains a discussion of the analyses and interpretation of data collected from a stratified random sample of 50 female United States residents who were members of the Council of Nurse Researchers, Division of the American Nurses' Association. Data were obtained from study participants who completed a demographic data sheet designed by the investigator and the 16 PF designed by Cattell (Cattell, Eber, & Tatsuoka, 1970).

Questionnaire Response

Fourteen days after the initial mailing, 40% (20 responses) of the questionnaires had been returned. A follow-up letter was then mailed to those who had not responded. An additional 14% (7 responses) were returned within 10 days of the second mailing. Therefore, a total of three weeks was allowed for subjects to respond.

Thirty-two (64%) of the 50 questionnaires mailed were returned, but only 23 were used in the study. Four (8%) of these were returned after data analysis procedures were completed; hence, they were not included in the analysis. Five (10%) study instruments were returned but not completed, and were likewise omitted from data analysis. Since no study materials were returned by the United States Postal Service as non-deliverable, the remaining 18 (36%) subjects presumably chose not to respond.

Additionally, three (6%) of the completed questionnaires were returned with comments relative to the cover letter, demographic data sheet or 16 PF. However, these materials were completed by study subjects and were therefore included in the data analysis.

Sample Description

The sample consisted of 23 female United States resident members of the Council of Nurse Researchers. Demographic data were compiled to describe this sample.

The average age of study participants was 45.7 years with a standard deviation of 10.1 and a range of 31 to 65 years (Table 2). The educational background of participants varied, however most (52.2%) had Ph.D. degrees (Table 3).

Years employed as a registered nurse ranged from 0 to greater than 20 years, with the majority of respondents

Table 2

Age Range and Frequency of Study Participants

Age Range	Frequency
30-34	3
35-39	5
40-44	2
45-49	3
50-54	5
55-59	3
60-64	1
65-67+	1
Total	23

Table 3

Frequency and Percentage of Reported Highest Education Degree Held by Subjects

Education Level	Frequency	Percent
M.S.	4	17.4
Ph.D.	12	52.2
Ed.D.	1	4.3
D.N.Sc.	5	21.7
Other	1	4.3
Total	23	100.0

(47.8%) having 20 or more years employment (Table 4). Most respondents (43.5%) indicated that they were employed as a nurse researcher between 0-4 years although the range extended from 0 to greater than 20 years (Table 5).

Table

Frequency and Percentage of Reported Number of Years
Employed as a Registered Nurse

Number of Years	Frequency	Percent
0- 4	1	4.3
5- 9	1	4.3
10-14	6	26.1
15-19	4	17.4
20 or more	11	47.8
Total	23	100.0

A college or university was the study subjects' most common place of employment (Table 6). When asked to choose the interval indicating hours per week spent on research activities, most respondents reported between zero and five (Table 7).

During the course of their nursing career, the majority (34.8%) of subjects had completed 12 or more publications (Table 8). The number of research grants

Table 5

Frequency and Percentage of Reported Number of Years
Employed as a Nurse Researcher

Number of Years	Frequency	Percent
0- 4	10	43.5
5- 9	6	26.1
10-14	6	26.1
15-19	0	0.0
20 or more	1	4.3
Total	23	100.0

Table 6

Frequency and Percentage of Reported Place of Employment
as a Nurse Researcher

Place of Employment	Frequency	Percent
Hospital (acute care facility)	2	8.7
College/University	18	78.3
Community	2	8.7
Self-employed	1	4.3
Research group	0	0.0
Total	23	100.0

Table 7

Frequency and Percentage of Reported Number of Hours Spent
on Research Activities per Week

Number of Hours	Frequency	Percent
0- 5	12	52.2
6-11	4	17.4
12-18	3	13.0
19-25	1	4.3
26-31	3	13.0
31 or more	0	0.0
Total	23	100.0

Table 8

Frequency and Percentage of Reported Number of
Professional Career Publications

Number of Publications	Frequency	Percent
0- 2	3	13.0
3- 5	7	30.4
6- 8	4	17.4
9-11	1	4.3
12 or more	8	34.8
Total	23	100.0

obtained by study participants ranged from zero to six with most respondents (56.5%) having received one to two (Table 9).

Table 9

Frequency and Percentage of Reported Number of
Research Grants Received

Grants	Frequency	Percent
0	7	30.4
1-2	13	56.6
3-4	1	4.3
5-6	2	8.7
7 or more	0	0.0
Total	23	100.0

The number of research projects for which respondents have served as a primary investigator ranged from one to six. Eighteen (78.3%) subjects served as principal investigator on one to three projects. The remaining five (21.7%) reported serving as principal investigator on four to six projects.

Presentation of Findings

The 16 PF test was used to obtain data regarding personality characteristics of nurse researchers. Brief

instructions relative to the completion of this questionnaire were provided in the cover letter. Additionally, more explicit instructions were described on the front cover of the test booklet. A separate answer sheet was provided for each subject.

Personality Characteristics of Nurse Researchers

The first question posed in this study was: What are the personality characteristics of nurse researchers? A one-sample t-test, performed on the 16 PF mean sten scores, was used in order to answer this question (Table 10). The study sample appeared to be average in 6 of the 16 characteristics. These were as follows: Factor H--shy versus venturesome ($p > .10$), Factor I--tough minded versus tender minded ($p > .10$), Factor L--trusting versus suspicious ($p > .05$), Factor M--practical versus imaginative ($p > .05$), Factor N--artless versus shrewd ($p > .05$), and Factor Q₁--conservative versus experimenting ($p > .05$).

Study subjects deviated from the average with regard to several characteristics. They were as follows: Factor A--more detached ($p < .0005$), Factor B--possessed a higher than average scholastic mental capacity ($p < .0005$), and Factor C--were more easily upset ($p < .0005$). Additionally, findings indicate that the sample reflected an assertive (Factor E; $p = .05$), serious (Factor F; $p < .0005$), expedient (Factor G;

Table 10

Mean, Standard Deviation, and t Values of Personality
Characteristics as Obtained from the Samples'
16 PF Scores

Factors	Sample Mean	S.D.	t Value
A --detached	5.609	1.92	5.41*
B --intelligent	7.130	1.39	4.48*
C --changeable	6.913	1.88	8.25*
E --humility	5.957	1.58	1.71*
F --sobriety	4.391	1.59	6.78*
G --expedient	5.130	1.74	4.27*
H --timidity ^a	6.348	2.24	.55
I --realistic ^a	6.870	1.94	.86
L --trusting ^a	4.522	2.08	1.70
M --practical ^a	6.696	1.72	1.60
N --forthright ^a	4.087	1.65	1.58
O --placid	4.783	2.06	3.65*
Q ₁ --conservatism ^a	7.565	1.67	1.08
Q ₂ --adherence	6.652	1.64	4.91*
Q ₃ --lax	5.862	2.21	2.93*
Q ₄ --tranquil	4.522	2.02	2.85*

^aCharacteristics that obtained average scores when compared with 30 year old female norms.

* $p \leq .05$.

($p < .0005$), and secure (Factor O; $p < .005$) personality. They were more self-sufficient (Factor Q₂; $p < .0005$), lax (Factor Q₃; $p < .005$), and tranquil (Factor Q₄; $p < .005$) than the norms documented by Cattell for females 30 years old. All scores are corrected through use of the Motivational Distortion (MD) Scale (Cattell, Eber, & Tatsuoka, 1970).

Personality Profile of Nurse Researchers

The second question posed in this study was: Are there similarities in the personality characteristics of nurse researchers? In order to answer this question, a Varimax Factor Analysis with a preliminary Alpha type rotation was performed (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Six factors accounted for variance ranging from 33.2% to 7.7% (Table 11). The factor weights of each characteristic are described in Table 12.

Table 11

Variance Obtained from Varimax Factor Analysis of
Samples' 16 PF Scores

Factor	Percent of Variance
I	33.2
II	21.6
III	16.4
IV	12.6
V	8.4
VI	7.7

Table 12

Factor Analysis Weights of Personality Characteristics Obtained
from Samples' 16 PF Scores

16 PF Factors	Factors					
	I	II	III	IV	V	VI
A	-0.04710	0.11141	-0.10574	0.65935 ^a	0.12496	0.12080
B	-0.30812	-0.28068	0.44337 ^a	0.66198 ^a	-0.11915	-0.11192
C	-0.66930 ^a	0.09316	0.07238	0.30456	0.17137	0.21866
E	0.00776	0.73876 ^a	-0.02896	0.02237	0.06434	-0.11054
F	-0.16801	0.12364	0.18011	0.22853	1.16898 ^a	0.00556
G	0.11601	-0.14214	-0.62982 ^a	0.00401	-0.00965	-0.04952
H	-0.32104	0.52304 ^a	-0.10106	0.38111	0.18287	0.11981
I	-0.04123	0.67102 ^a	0.25073	0.22948	-0.20647	0.19262
L	0.07560	0.02483	0.10227	-0.15841	0.08061	-0.91430 ^a
M	-0.17164	-0.06814 ^a	0.36328	0.31654	0.12198	-0.04789
N	0.48934 ^a	-0.49464 ^a	-0.10798	0.17450	0.06056	0.28542
O	0.83905 ^a	-0.23875	-0.17238	-0.01650	0.06420	-0.08212
Q1	-0.03004	0.55697 ^a	0.08744	-0.15424	0.15526	0.14171
Q2	0.02536	0.31064	0.14139	-0.14974	0.28490	0.44613
Q3	-0.18199	-0.06115	-0.67790 ^a	0.05475	-0.09448	0.05542
Q4	0.84318 ^a	0.19981	0.22600	-0.16692	-0.14176	0.12395

^aSignificant factor weights.

The nurse researchers' profile was presented to a clinical psychologist for consultation regarding congruence in factors and interpretation of results. Factor I reflects a changeable individual with a skillful approach to others and a self-assured and relaxed personality. Factor II identifies an assertive individual who is average in timidity, tough-mindedness, and forthrightness characteristics. Factor III indicates an abstract thinker with average expedience who is careless of social rules. Factor IV reflects a critical, abstract thinker. Factor V represents soberity or reticence in personality. Factor VI indicates an average trusting individual. No single term could be derived to describe the factors in which multiple personality characteristics were apparent.

Summary

In this chapter the data analyses were discussed. The sample included 23 female United States resident members of the Council of Nurse Researchers. Subjects completed a demographic data sheet and a 16 PF test. The demographic variables were described by mean, mode and percentages. Personality characteristics, obtained through use of the 16 PF, were described using means, standard deviations, and a t-test. Similarities in the personality

characteristics of the sample were described using Varimax factor analysis.

CHAPTER 5

SUMMARY OF THE STUDY

Female members of the Council of Nurse Researchers who were United States residents were surveyed regarding certain demographic variables and personality characteristics. In this chapter, study findings are discussed. Conclusions, implications and recommendations for further study also are presented.

Summary

This study was developed because of an observed lack of data regarding nurse researchers. Specifically, the study was designed to answer the following research questions:

1. What are the personality characteristics of nurse researchers?
2. Are there similarities in the personality characteristics of nurse researchers?

This investigation was conducted by mailed questionnaires to United States resident female members of the Council of Nurse Researchers, American Nurses' Association. The sample was composed of 23 randomly selected female nurse researchers. Data were collected

by means of a demographic data sheet designed by the investigator and the 16 PF test developed by Cattell.

The demographic data sheet requested data regarding the study participants' educational background, length of employment as a registered nurse, length of employment as a nurse researcher, place of employment, number of hours per week spent on research activities, number of publications, number of research grants and the number of research projects in which the study respondent served as primary or principal investigator. The 16 PF was used to identify personality characteristics of the nurse researchers.

The variable age was analyzed and reported using the sample mean and standard deviation. The remaining demographic variables were analyzed in terms of modes and percentages. The means and standard deviations of personality factor scores were reported for each personality characteristic. A t-test was performed on those means to discern whether they significantly deviated from the general population. A Varimax Factor Analysis was used to describe the similarities in personality characteristics of nurse researchers.

Discussion of Findings

Adler's (1955) theory of personality provided a framework for the questions posed in this study. Unlike many of his predecessors, he viewed the environment as an outcome rather than a cause of behavior. Adler attributed behavior to the underlying personality type or characteristics of an individual.

Cattell (1965) has provided documentation that serves as empirical verification of Adler's theory. Research studies have been performed that validated items of the 16 PF, and Cattell has described similarities in the personality characteristics of stratified populations (Cattell, 1965). Today, counselors, employers and educators use personality profiles to assist in vocational placement or as guidance mechanisms for individuals seeking specific career goals.

Description of Sample

This was a nonexperimental descriptive study. The sample average age was 45.7 years with a median of 45.2 years. This statistic exceeds the median age of the general nurse population of 39.8 years reported in the literature (Roth, Graham, Schmittling, 1977)

Most participants had a Ph.D. degree. Paletta (1980) noted that an increasing number of nurses seeking doctoral

degrees were seeking Ph.D. degrees instead of the Ed.D. degrees that had been traditionally obtained by nurses. Because only one (4.3%) subject had an Ed.D., Paletta's report was substantiated.

Most study subjects were employed as registered nurses for 20 or more years. However, the majority had been employed as a nurse researcher for zero to four years. Contrary to reports in the literature concerning the extent and history of nursing research (Gortner & Nahm, 1977), it appears that employment as a nurse researcher is a relatively new function within this sample. Additionally, because the interval listed in the demographic data sheet was zero to four years, some subjects may not have been employed as nurse researchers. However, consideration should be given to the fact that, while not employed as researchers, subjects may still have been performing research activities.

Study subjects were most frequently employed in colleges or universities. The primary function within an academic setting is teaching, and this fact may have been responsible for the paucity of time spent per week on research activities. Recognizing teaching as the primary role of the academician, Paletta (1980) described the necessity for nonacademic placement of nurse researchers.

Like Paletta, Andreoli (1977) and Martinson (1976) have listed obstacles and challenges to nursing research. One such obstacle for academically placed investigators is that not enough time is allocated by administrators for academicians to pursue research. Whether this factor was primarily responsible for the amount of time spent on research activities could not be definitively ascertained in this study.

Most study participants had authored or coauthored 12 or more publications, but it was not determined if these publications were research oriented. However, regardless of the content of the publications, it is apparent that this sample is contributing to the literature.

Most study participants had received one to two research grants. This statistic coupled with the most frequent number of research projects in this sample, one to three, may reflect a trend toward funded nursing research. However, another interpretation of these findings is possible. Because the majority of the subjects were nurses with Ph.D. degrees, the number of projects may indicate completion of theses or dissertations. If this is the case, then these research projects are being funded. However, the literature has not described this trend (Paletta, 1980).

Personality Characteristics

The 16 PF test was used to ascertain personality characteristics of nurse researchers. These characteristics were then compared with a norms table of females, 30 years of age (Cattell, Eber, & Tatsuoka, 1970).

Although it is not surprising that subjects were average in some of the personality characteristics, it is noteworthy that these included the imaginative and experimenting factors. Based on Adler's (1955) theoretical framework the environment or occupation chosen by individuals should be consistent with their personality. Polit and Hungler (1978) stated that the development of the research problem is essentially a creative process, dependent upon imagination. In keeping with this framework it is unlikely that an individual who is neither imaginative nor experimenting would choose research as an occupation.

Study subjects deviated from the average with regard to the remaining characteristics. They were more detached, possessed a higher than average mental capacity and were changeable. These findings appear consistent with reports in the literature for nurses completing an advanced degree (Devereaux, Braun, Mentink, & Morgan, 1978; Lewis & Cooper, 1976). The higher than average scholastic mental capacity has been shown to be an "academic suitability" determinant

in predictive studies aimed at identifying success or failure of degree candidates (Reavley & Wilson, 1972). Hence, these characteristics may reflect the subjects' educational achievement rather than their research function.

The characteristics of security, self-sufficiency and tranquility appear correspondent and interrelated. Similar findings have been documented with nurses who have tenure or long standing service records in their place of employment (Cooper, Lewis, & Moores, 1976). Because most subjects were employed as registered nurses for 20 or more years these findings may reflect employment or job related security.

Additionally, subjects were serious, expedient and undisciplined. Although sobriety may or may not be a characteristic of a nurse researcher, expedience and lack of discipline (inability to adhere to guidelines) have been consistently documented behaviors for nurses regardless of educational background (Adams & Klein, 1970; Burton, 1972) or specialty (Jones, 1975). These two characteristics might likewise be viewed as poor prognostic indicators for individuals executing a sometimes tedious, methodical process like research.

Based on the findings of this study, subjects had a similar profile with each other. Factor I is the profile

of individuals who tend to be low in frustration tolerance yet skillful in their approach to other people. This profile appears very similar to that documented for nurse administrators (Lewis & Cooper, 1976). Similar to administrators, a researcher could use a diplomatic or skillful approach to people in order to obtain support for proposed projects. A low frustration tolerance may reflect susceptibility to anxiety (Hilgard, 1957).

Similar to Factor I, Factor II closely parallels the characteristics of nurse administrators described by Lewis and Cooper (1976). This profile represents self-assured persons who are sociable, cognizant of their surroundings, skillful in their approach to people and moderate in their views. Sociability, self-assuredness, awareness of surroundings and skill in approach could be used in the same manner as nurse administrators for obtaining support in projects or in seeking grant monies. Moderation in thought may reflect a conservative attitude of these subjects. In order to interpret this finding, it would have been necessary to ascertain whether study subjects addressed conservative or radical issues in their research. This information was not obtained.

Factor III represents an abstract thinker who is aware of social rules but has little regard for them. Reeve (1978) has documented a similar profile for psychiatric

nurses. In relation to research, failure to abide by rules may be a deterrent because this process is highly ordered. Conversely, acceptance of social rules could imply an a priori or authoritarian process which would be incongruent with scientific method.

Factor IV reflects a critical, abstract thinker which is again similar to the profile of the psychiatric nurse (Reeve, 1978). This profile indicates an aloof, fast learner.

Factor V represents sobriety and reticence in personality. This type of individual tends to be introspective and dependable. Additionally, this profile appears to be specific to study subjects because no comparable description of nurses' personality is available in the literature.

Persons of average trust are depicted by Factor VI. This profile is common among registered nurses in general (Lukens, 1965; Reavley & Wilson, 1972; Webb & Herman, 1978). Hence, this finding appears congruent with reports available in the literature.

This sample was stratified not only in relation to membership in the council of Nurse Researchers, but also in regard to degree held and place of employment. Whether or not these extraneous variables serve as the common

denominator for the profile described in this study could be determined only through replication.

Conclusions

The following conclusions are supported through the study findings:

Female United States resident members of the Council of Nurse Researchers:

1. Are older than the average nurse population.
2. Are most frequently employed in a college or university.
3. Have primarily Ph.D. degrees.
4. Spend little time in research activities.
5. Deviate from the average 30 year old female in 10 of the 16 personality characteristics as measured by the 16 PF.
6. Possess a similar personality profile in six distinct factors.

Implications

This study was concerned with the personality characteristics of nurse researchers. The following are implications for the nursing profession:

1. Most of the sample was employed in university settings with a minority of nurse researchers in clinical or community settings. Therefore, non-academic placement

of nurse researchers is indicated in order to vary the approach to nursing research.

2. There is a paucity of time spent for research activities, and an increase in time allotted for such activities is implied.
3. Although nurse researchers had personality characteristics similar to other nurses, this profile taken collectively differentiates them from their colleagues.

Recommendations

The following recommendations are proposed as a result of this study.

1. Based on the comments from study participants, the cover letter used to introduce this study should be revised. A more thorough explanation of the specific aims of the study should be included.
2. The demographic data sheet should be altered in the following manner:
 - a. Rather than providing study respondents with interval choices they should be allowed to specify point data.
 - b. Thesis and dissertation research activity should be differentiated from other research projects.
3. The study should be replicated with a larger sample size.

4. Sampling should be performed within similar research groups.
5. The personality profile developed in this study should be validated through replication of the study.

APPENDIX A

ANA COUNCIL OF NURSE RESEARCHERS' PERMISSION
AND TEXAS WOMAN'S UNIVERSITY APPROVAL

Barbara L. Nichols,
M.S., R.N.
President



Myrtle K. Aydelotte,
Ph.D., R.N., F.A.A.N.
Executive Director

American Nurses' Association • 1980 Convention/June 8-13 • Houston, Texas

April 21, 1980

Thomas Kalad, B.S., R.N.
7298 Kingsgate #94
Houston, Texas

Dear Mr. Kalad:

Your request for use of the American Nurses' Association Council of Nurse Researchers' mailing list has been approved by the Executive Committee of the Council of Nurse Researchers. A set of pressure sensitive address labels for the council is enclosed.

It is the understanding of the Executive Committee that you will consider this information confidential and will not duplicate or distribute the names and addresses of members of the council. Also, the Executive Committee recommends that for use in your research, that you do not use the entire list but select a random sample. A copy of all materials sent to members of the council should be forwarded to the Research and Policy Analysis Department at ANA for our files.

We wish you well with your research project and would, of course, be interested in the results of your research.

If you have any questions regarding the above, please do not hesitate to contact us.

Sincerely,

Dorothy Young
Technical Assistant
Research and Policy Analysis Department

Enclosure

cc: Dr. Susan Gortner

TEXAS WOMAN'S UNIVERSITY
HOUSTON CAMPUS
HUMAN RESEARCH REVIEW COMMITTEE
REPORT

STUDENT'S NAME Thomas J. Kaled

PROPOSAL TITLE Personality Characteristics of Nurse
Researchers

COMMENTS: _____

DATE: Oct 21, 1980

Janet G. Robertson
~~Disapprove~~ Approve

Donna W. White
~~Disapprove~~ Approve

William H. Harris
~~Disapprove~~ Approve

Janet F. Gable
~~Disapprove~~ Approve

John D. Myers

APPENDIX B

LETTER TO PARTICIPANTS

Dear Nurse Researcher,

I am a graduate student in the College of Nursing at Texas Woman's University and am conducting this study in partial fulfillment of my graduate degree in nursing. The purpose of this study is to obtain information about the personality characteristics of nurse researchers.

I have received permission from the American Nurses' Association to conduct this survey. Your name was randomly chosen from a mailing list provided to me by the ANA. A copy of the research results will be sent to the Council of Nurse Researchers, ANA, upon completion of the study.

Since each individual response will be kept confidential, please do not place your name or any distinguishing marks on the study forms. RETURN OF THESE FORMS CONSTITUTES INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH!!!
NO COMPENSATION IS PROVIDED TO SUBJECTS BY THE UNIVERSITY OR THIS INVESTIGATOR AS A RESULT OF INJURY FROM PARTICIPATION IN THIS STUDY!!!

There are no right or wrong responses on study forms so please give answers that are true for you. Please return the completed questionnaires within two weeks of their arrival.

Enclosed you will find a stamped, self-addressed envelope; please use this for return of the forms. Thank you for your time and consideration.

Sincerely,



Thomas J. Kaled

APPENDIX C

FOLLOW-UP LETTER TO PARTICIPANTS

Dear Nurse Researcher,

I have not yet received the study forms forwarded to you. As you will recall, this information will be used in a descriptive study and individual responses will be kept confidential.

Again, I will stress that participation in this study is of a voluntary nature only. I appreciate sincerely your cooperation.

Thank you again,

Thomas J. Kaled, R.N.

APPENDIX D

DEMOGRAPHIC DATA QUESTIONNAIRE

DEMOGRAPHIC DATA

Please complete the following questions by placing a check in the appropriate space. Please answer all questions. Please do not place your name or any distinguishing marks on this paper. Mark only one item!! Thank you for your time and cooperation.

1. Age: _____ (years)

2. Highest education degree held at present:

<u>Degree</u>	_____	<u>Major</u> (e.g., Nursing, Edu....)	_____
a. Diploma	_____		_____
b. Associate	_____		_____
c. Baccalaureate	_____		_____
d. Master's	_____		_____
e. Ph.D.	_____		_____
f. Ed.D.	_____		_____
g. D.N.Sc.	_____		_____
h. Other	_____		_____

3. Years employed as a registered nurse:

a. 0-4	_____
b. 5-9	_____
c. 10-14	_____
d. 15-19	_____
e. 20 or >	_____

4. Years employed as a nurse researcher:

a. 0-4	_____
b. 5-9	_____
c. 10-14	_____
d. 15-19	_____
e. 20 or >	_____

5. Place of employment as a nurse researcher:

a. Hospital (acute care facility)	_____
b. College/University	_____
c. Community	_____
d. Self-employed	_____
e. Research group	_____
f. Other _____	_____

6. Estimate the number of hours/week spent on research activities:
- a. 0-5 _____
 - b. 6-11 _____
 - c. 12-18 _____
 - d. 19-25 _____
 - e. 26-31 _____
 - f. 31 or > _____
7. Check the number of professional publications (re. publications which appear in nursing, psychology, etc.) which you have completed in your career.
- a. 0-2 _____
 - b. 3-5 _____
 - c. 6-8 _____
 - d. 9-11 _____
 - e. 12 or > _____
8. Check the number of research grants you have received as a nurse researcher.
- a. 0 _____
 - b. 1-2 _____
 - c. 3-4 _____
 - d. 5-6 _____
 - e. 7 or > _____
9. Check the number of research projects that you have been the primary/principal investigator in your professional career.
- a. 0 _____
 - b. 1-3 _____
 - c. 4-6 _____
 - d. 7-9 _____
 - e. 10 or > _____

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