THE TEMPERAMENT TYPES OF NURSING ADMINISTRATORS IN HOSPITAL NURSING SERVICE (U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH D J GARVIN MAY 84
The Temperament Types Of Nursing Administrators In Hospital Nursing Service

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ABSTRACT

THE TEMPERAMENT TYPES OF NURSING ADMINISTRATORS IN
HOSPITAL NURSING SERVICE

The purpose of this descriptive research study was to identify the temperament types of nursing service administrators of Texas hospitals with a bed capacity of 200 beds or more using the Keirsey Temperament Sorter. The data gathered was used to begin the development of a profile of traits of nurse administrators. The three research questions for this research study were: (1) What are the temperament types of nurse administrators of hospital nursing service in Texas, as measured by the Keirsey Temperament Sorter?, 2) Is there a predominant temperament type for nurse administrators of hospital nursing service in Texas?, and (3) Is there a significant difference in the temperament types of nurse administrators?

The sample for this study were nurse administrators of nursing service of hospitals with a bed capacity of 200 beds or more in the State of Texas. Using the survey approach, the Keirsey Temperament Sorter was mailed to the nurse administrators. Twelve of the possible 16 temperament types were identified among the respondents. One hundred and ninety-one instruments were returned from a sample population of 297. The predominant temperament type was
extraversion, sensation, thinking, and judging (ESTJ), being found on 66 of the 192 instruments returned. Using the chi-square statistical procedure ($X^2 = 342.33$), a significant difference at the .05 level was found among the temperament types of nurse administrators of nursing service of hospitals with a bed capacity of 200 beds or more.

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by

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Presented to the Faculty of the Graduate School of The University of Texas at Arlington in Partial Fulfillment of the Requirements for the Degree of

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April 4, 1984
ABSTRACT

THE TEMPERAMENT TYPES OF NURSING ADMINISTRATORS IN
HOSPITAL NURSING SERVICE

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The University of Texas at Arlington, 1984

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The purpose of this descriptive research study was to identify the temperament types of nursing service administrators of Texas hospitals with a bed capacity of 200 beds or more using the Keirsey Temperament Sorter. The data gathered was used to begin the development of a profile of the traits of nurse administrators. The three research questions for this research study were: 1) What are the temperament types of nurse administrators of hospital nursing service in Texas, as measured by the Keirsey Temperament Sorter?, 2) Is there a predominant temperament type for nurse administrators of hospital nursing service in Texas?, and 3) Is there a significant difference in the temperament types of nurse administrators?
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CHAPTER I

INTRODUCTION

Introduction

Nursing is entering a difficult stage in the quest for recognition as a profession. With the ever changing demands made by the advances in health care technology and today's economic picture of health care, it is more important than ever that qualified nurse administrators be placed into positions of leadership and management (Nouri & Rainville, 1972).

One avenue available to identify potential nurse administrators is to first develop a profile of those in nurse administrative positions. Further study can then be conducted to refine the qualities required to be an effective nurse administrator. Once this has been accomplished an educational process can be developed for future nurse administrators to provide the experiences needed by nurses to develop into good managers (Bernhart & Walsh, 1981).

Thus the administration could use the education program to prepare potential nurse administrators for advancement into nurse administrative positions, rather than promoting people due to longevity in an institution, being in the right place.
at the right time, or being promoted due to clinical skills rather than managerial skills.

There are different theories that relate to leadership, such as the great-man theory, the trait theory, the contingency theory, and the path-goal theory of leadership. Of these theories, trait theory offers a way to develop profiles of nurse administrators (Kast & Rosenzweig, 1979). Jung (1921/1971), one of the theorists who assisted in refining the trait theory, developed a theory of psychological types which describe the preferences of individuals in their choice of behavior. Myers operationalized Jung's theory of psychological types in the form of the Myers-Briggs Type Indicator (Myers, 1962). This was further refined by Keirsey, who developed the Keirsey Temperament Sorter (Keirsey & Bates, 1978).

The initial step toward the development of profiles of nurse administrators may be taken using the Keirsey Temperament Sorter. Once the temperament types of nurse administrators have been identified, the next step will be that of refining the qualities necessary for effective nurse administrators. The purpose of this descriptive research study was to identify the temperament types of nurse administrators of hospitals in the State of Texas.
Statement of Problem

The problem for this descriptive survey of nurse administrators was:

What are the temperament types of nurse administrators of hospitals in the State of Texas?

Background and Significance

The study of traits or characteristics of leaders/managers evolved out of the great-man theory of leadership (Keane, 1981). The premise of this theory is that the predominant characteristics of leaders could be identified by studying the biographies of those individuals who were considered great leaders (Bernhard & Walsh, 1981).

In 1940 Bird reviewed twenty investigations on the subject of leadership. Seventy-nine traits were identified in the studies with little overlap of traits from study to study. Sixty-five percent of the traits were mentioned only once, 20% of the traits were found on two lists, 5% of the traits were found on three lists, another 5% were found on four lists, with two traits being common to five lists. The trait of initiative was found on six lists. The trait of high intelligence was found on ten lists. Bird cited the following qualities as being in common among leaders: being intelligent, being able to
acquire information and knowledge, being extroverted, and being in a higher socioeconomic state.

In 1948 Stogdill surveyed the literature and compiled a list of the traits and characteristics of leaders. Five traits of a leader found in fifteen or more studies were: above-average intelligence, above-average scholarship, dependability in exercising responsibilities, above-average level of social participation, and social economic status. The traits which had the highest overall correlation with leadership were: originality, popularity, sociability, judgment, aggressiveness, humor, cooperativeness, and liveliness. Other characteristics listed by Stogdill were the desire to excel and athletic ability.

Katz (1955) describes the manager/administrator as needing three skills to be effective: technical, human, and conceptual. Technical skill is having the understanding of and being proficient in the actual tasks of the agency. Human skill is defined as having the ability to work effectively with a group of using good communication techniques and being knowledgeable of personal biases. Conceptual skill is the ability to see the organization as a whole and how the different parts are interdependent on one another, as well as the relationship of the organization to other organizations in the same business. Each skill is
necessary at every level of management. Technical skill is of greatest importance at the lower levels of management, where supervision of workers takes place. Human skill is important at the lower level of management because of the need to interact directly with a large number of workers. Conceptual skill is increasingly critical in the higher level of management where it is more easily observed and the effect maximized.

Due to the lack of consensus on the traits of effective administrators, further research needs to be done (Merton, 1969). The significance of this research study is that it will serve as the initial step in the refinement of the qualities needed by nurse administrators. Therefore, a major outcome could result in the development of an educational program that would provide potential nurse administrators with the opportunity to develop these qualities.

Further study with temperament types could lead to a method of matching an individual's temperament type as identified with the Keirsey Temperament Sorter or similar instrument with an occupation (Keirsey & Bates, 1978). It could also assist supervisors in making work assignments according to individual temperament, resulting in a satisfied, productive worker. The use of temperament types
can also be a benefit in improving human relations, by matching supervisors and workers for a more harmonious work environment. By knowing the temperament types of individuals, a supervisor can group those individuals together who work well together, as well as matching workers with a specific job (Douglass & Bevis, 1983). Using this information, interactions can be structured to provide a more harmonious exchange of ideas.

**Theoretical Framework**

The theoretical framework used for this study was taken from Jung's (1921/1971) theory of psychological types. Jung outlines six psychological types, two attitude types and four functional types. The attitude types, introversion and extroversion, characterize the general psychological orientation of the individual (Munroe, 1955, p. 547). The functional types, sensation, intuition, feeling, and thinking, describe the way in which the empirical world is conceptualized by an individual (Munroe, 1955, p. 545). Using the various combinations of these types allows for a method of dividing individuals into basic groups which are descriptive of the interpersonal relationships, the general approach to life, and even to differences in ideologies of individuals. Each of the psychological types is present in some degree in everyone. Usually one
attitudinal type and two functional types combine to dominate the behavior and actions of an individual (Munroe, 1955).

In 1942, Myers developed the Myers-Briggs Type Indicator to make Jung's theory of psychological types operational (Myers, 1962). Building on the work done by Myers, Keirsey developed the Keirsey Temperament Sorter, a shorter instrument to describe the temperament types of individuals.

In profiles of the different combinations of psychological types, nurses studied have been found to be the combination of introversion, sensation, feeling, and judging types (ISFJ) (Keirsey & Bates, 1978). ISFJ types work well with people, are responsible, attain satisfaction from taking care of the needs of others, have a talent for following routines, and prefer to be practical rather than theoretical. Outstanding leaders have been found to be the combination of extroversion, intuition, feeling, and judging types (ENFJ) (Keirsey & Bates, 1978). The ENFJ types work well with both task and growth groups, are tolerant of others, make excellent executives, and have good communication skills.
Statement of Purpose

The purpose of this descriptive research study was to identify the temperament types of nursing service administrators of Texas hospitals with a bed capacity of 200 beds or more, using the Keirsey Temperament Sorter.

Research Questions

Three research questions were formulated for this research study. The first research question serves as a base on which the other two build. The research questions were:

1. What are the temperament types of nurse administrators of hospital nursing service in Texas, as measured by the Keirsey Temperament Sorter?

2. Is there a predominant temperament type for nurse administrators of hospital nursing service in Texas?

3. Is there a significant difference in the temperament types of nurse administrators?

Assumptions

The following assumptions were made for this study:

1. Individuals completing the survey instrument (the demographic sheet and the Keirsey Temperament Sorter) did so honestly (Polit & Hungler, 1978).
2. The Keirsey Temperament Sorter measures the temperament types of those completing the instrument (Keirsey, 1983).

Limitations

The limitation of this research study was that the results of this study apply only to nurse administrators (nurse managers in top management positions) of nursing service in hospitals with a capacity of 200 beds or more in the State of Texas, and are not generalizable to any other group of individuals.

Definition of Terms

For the purposes of this descriptive research study, the following definitions were used:

1. Nurse administrator--a nurse manager in a top management position in hospital nursing service.

2. Temperament Types--moderation of disparate forces, providing an overall influence to an individual's actions, which determine behavior (Keirsey & Bates, 1978).

3. Introversion--an individual's orientation is primarily on the inner world, focusing perception and judgment upon concepts and ideas (Myers, 1962).
4. Extroversion--an individual's orientation is primarily on the outside world, and thus tends to focus perception and judgment upon people and things (Myers, 1962).

5. Sensation--an individual relies primarily on the familiar process of sensing, by which individuals are made aware of things directly through the senses (Myers, 1962).

6. Intuition--indirect perception by way of the unconscious, with the emphasis on ideas or associations which the unconscious tacks on to the way things are perceived by an individual (Myers, 1962).

7. Feeling--determines according to personal values by an individual (Myers, 1962).

8. Thinking--determines impersonally between right and wrong by an individual (Myers, 1962).

Summary

In order to explore the qualities needed to be a nurse administrator, this descriptive research study was developed to begin the development of a profile of the traits of a nurse administrator. To guide this study the theories on leadership were reviewed. Trait theory of leadership was identified as providing an appropriate method for developing profiles of leaders for this study. With Jung's (1921/1971)
theory of psychological types as the theoretical foundation, the Keirsey Temperament Sorter was used to conduct the data collection to identify the temperament types of nurse administrators. The purpose of this descriptive research study was to identify the temperament types of nurse administrators of Texas hospitals with a bed capacity of 200 beds or more, using the Keirsey Temperament Sorter.
CHAPTER II

LITERATURE REVIEW

Introduction

The review of literature will be divided into the following major sections. The first section will cover the information found in business and nursing literature on the traits and characteristics of leaders. The second section will be the information on the traits and characteristics of managers and nurse managers. The third section will be a discussion of the differences between a manager and a leader. The review of literature will conclude with a discussion of the traits and characteristics of nurse administrators.

Leaders

Titus (1950) cites the following six characteristics as being common to leaders: (1) commanding a higher level of intellectual capacity than those being led; (2) having self-significance; (3) possessing vitality, abundant energy and enthusiasm; (4) having leadership training, having been tutored or received guidance on leadership;
(5) having some type of past experience in a leadership position; and (6) bearing the reputation of a leader.

A profile of leaders by Ross and Hendry (1957) lists six qualities/characteristics of a leader. They are:

1. self-confident; well-integrated; emotionally stable;
2. willing and competent to lead in a particular situation;
3. identified with the norms, values, and goals of the group;
4. warm, sensitive, and sympathetic; able to help individuals in a practical way;
5. intelligent in relation to other group members; and
6. consistent in performing his leadership functions.

Bass (1981) conducted a follow-up study of Stogdill's work reviewing the literature from 1948 until 1970. The ten traits found at that time revealed a refinement of those listed by Stogdill. These ten traits are as follows:

1. strong drive for responsibility and for task completion;
2. vigor and persistence in pursuit of goals;
3. venturesomeness and originality on problem-solving;
4. drive to exercise initiative in social situations;
5. self-confidence and having a sense of personal identity;
6. willingness to accept the consequences of decisions and actions;
7. willingness to absorb interpersonal stress;
8. willingness to tolerate frustration and delay;
9. ability to influence others' behavior; and
10. capacity to structure social interaction systems to the purpose at hand (Bass, 1981, p. 81).

Davis (1967) cites four traits related to successful organizational leadership. Included are intelligence and initiative as cited by Keane (1981) and Ghiselli (1959). The other two traits are social maturity and breadth, and a healthy human relations attitude. Davis (1967) defines the trait of social maturity and breadth as having a broad range of interests and activities; being emotionally mature, able to engage in power struggles without being overwhelmed by the results; having a high frustration level; and being self-assured. Davis describes "a good human relations attitude" as having a healthy respect for people. These leaders realize they must work through others and that they need social skills to work successfully with people.

In a study of 90 successful chief executives of business, five key leadership traits were identified: vision; communication and alignment; persistence,
consistency, and focus; ability to empower others; and organizational learning (Bennis, 1981). Vision is the capacity to create a clear, active picture of the desired state of affairs. Having the ability to share the vision in order to gain the support of their constituencies is the trait of communication and alignment. Persistence, consistency and focus is the capacity to guide an organization towards its goals, despite numerous obstacles. The trait of empowering others is the ability to orchestrate the members of the organization, tapping and harnessing their abilities and energies to accomplish the goals of the organization. Finding ways to monitor the organization's performance in order to make decisions reflects the fifth trait of organizational learning. Another item of importance to successful executives is the concern for their organization's basic purpose and its general direction.

Kritsonis (1982) compiled a list of twelve characteristics of successful school superintendents. The first six characteristics are: (1) courage in meeting the responsibilities of the job; (2) decisiveness: ability to make a decision and communicate it to those involved; (3) dependability to accomplish the job on time; (4) endurance, both physical and mental; (5) enthusiasm about their job; and (6) initiative to do what needs to
be done. The last six characteristics are: (1) integrity as a person; (2) judgment ability, to be fair after weighing all the facts; (3) impartiality and consistency in their judgments; (4) loyalty to the school system and those in it; (5) sensitivity to different pressure and interest groups; and (6) knowledgeable, always working to be current in areas affecting the school.

**Nurse Leader**

King (1981a, 1981b) wrote two articles on nursing leadership. The first article, *Leadership: Essential Qualities*, identified five essential qualities of leadership: natural leadership, competence, high level of commitment, enthusiasm, and ego strength. King defines natural leadership as that quality where, title or no title, these individuals are looked to when questions arise. Competence is defined as having an expertise in a given area. High level of commitment is indicated by the attitude of these individuals toward their career development and client care, which is demonstrated in both word and action. They show genuine enthusiasm for their work. The ego strength of these individuals is based on self-confidence, interpersonal skills, problem solving skills, knowledge of themselves, and a willingness to be themselves.
King's (1981b) second article identifies three basic skills necessary for a leader to be a good manager: people, clinical, and organizational. These skills relate to the management characteristics outlined by Wright (1983). People skills include the ability to interact in a genuinely caring, non-threatening manner while maintaining the ability to confront, counsel and see the good qualities in supervised individuals. Clinical skills reflect the need for clinical expertise, educational enthusiasm, and commitment to learning and teaching. Organizational skill is the ability to design systems that improve efficiency, identify inefficiencies, think logically, and organize projects. The three skills are combined to produce an effective manager/leader.

**Manager**

The traits of above-average intelligence, supervisory skills, initiative, self-assurance, and individuality are listed as important for managers by Geier (1967), Ghiselli (1959), and Keane (1981). The level of intelligence of the supervisors and the workers is considered a key factor. If the difference between them is too great, there is a break in effective communication (Davis, 1967). Supervisory skills are considered to be the interpersonal skills and abilities necessary to establish rapport with the workers.
Initiative means acting without stimulation from anyone else, foreseeing problems and working to correct them. Keane (1981) defines self-assurance as having the confidence and ability to cope with stress, to deal with the issue at hand, and to have the drive to accomplish goals. The trait, individuality, is seen as the quality that makes the leader stand out in a crowd.

Katz updated his work on managerial skills in 1974. His view of the usefulness of the skills at different levels of management had changed. Human skill is now divided into two parts. The first part is leadership ability within the manager's own unit, seen as most important at the lower and middle management positions. The second part of human skill is having skill in intergroup relationships, which is viewed as increasingly more important in successively higher levels of management. Conceptual skill is now seen as the balancing of the relative emphasis and priorities among conflicting objectives and criteria, relative tendencies and probabilities (rather than certainties), rough correlations, and patterns among elements (rather than clear-cut cause and effect relationships). Technical skill is required throughout the management levels since the manager must know the right questions to ask to solve or prevent problems. Overall, Katz (1974) says that managers need some competence in all three skills to succeed.
In a study of top data processing managers, seven common traits were identified (Schultz, 1982). Trait number one: these individuals participated in the top-level decision-making of their organizations and reported directly to the president of their company. Trait number two: they considered themselves to be managers, not data processors. The third trait was the feeling they were contributing substantially to the company. The next trait was maintaining a high level of visibility to other members of the company. Keeping a political eye on the inter-relationships of the company executives was trait number five. Trait number six was having an accurate picture of the critical success factors in their company. The last trait identified by this study was that these managers knew how to give up power and to gain power gracefully within their organization.

In two studies of successful male and female middle managers, Schein (1973, 1975) reported that these individuals are perceived to possess those characteristics, attitudes, and temperaments more commonly ascribed to men than to women. Some of the ascribed items are the qualities of being well-informed, self-reliant, objective, vigorous, and not frivolous. Five items identified as being found in successful middle managers not related to sex are:
competence, intelligence, persistence, not being devious, and not being bitter (Schein, 1975).

**Nurse Managers**

Speaking to the humanistic side of management, Wright (1983) identifies eight attributes of a modern manager. Timing is the first; it is the ability or sense of knowing when and when not to take an action. Having finesse is second; finesse is defined as the ability to gracefully execute a strategy which will produce the desired result. The third, tact, is the ability to interact with others in such a way as to produce the desired results without alienating someone. The fourth attribute is "completed staff work," being able to answer questions about what is going on in the department, and what results are being produced. Accessibility is next, being available to staff when needed. Approachability follows; approachability concerns being consistent, fair, and sensitive to everyone. Versatility, in being able to adapt to the current problem without losing control, is number seven. The last attribute is having a well developed sense of humor.

Wright (1983) also gives a set of managerial characteristics. A manager must be able to:

1. achieve the respect of others as a humanistic manager;
2. accept others as they are;
3. be understanding and responsive to other managers and to the personnel supervised;
4. give and receive criticism without being overwhelmed by it;
5. discern the difference between constructive and destructive criticism;
6. have creative and innovative ideas and approaches to management and to change;
7. be willing to make decisions and to be accountable for them;
8. be assertive and humanistic in communication with others;
9. develop an understanding of and to support decisions that have been made by higher administration;
10. be willing to accept failure but not defeat; and
11. continue to grow, never being satisfied with the current knowledge.

In presenting guidelines for management of an emergency center, Bautsch (1980) outlined characteristics of good nurse managers. These characteristics include: holding a level of clinical expertise; understanding what subordinate staff members are doing; being fair and consistent;
providing incentives; being industrious; having initiative; and being knowledgeable. An important point stressed by Bautsch (1980) is the proper use of communications between all levels of workers.

Schweiger and Hamilton (1980) present a list of attributes essential to a good manager/leader. The manager/leader needs to be able to accept both success and failure with grace and to be a risk taker. Managers must accept responsibility for their actions. They must be able to honestly evaluate themselves, to identify weaknesses and strengths, and to work within their limitations. It is important that the manager be able to deal effectively with frustration and be internally motivated.

Fralic and O'Connor (1983) apply the concepts of management skills as described by Katz (1974) to nursing. A nurse executive needs to be competent in conceptual skills and able to link the process of providing nursing care to the functioning of the hospital as a whole. The nurse executive needs a high level of human skills to harmonize the demands of the organization, the collective staff and the individual staff member's demands with the purpose of nursing. In technical skills, the nurse executive uses knowledge of nursing technology to be able to see the implications of administrative requirements on
the clinical practice of nursing in the institution, and the implications of advancements in client care. The nurse executive uses the technical skills of management technology to maximize personal and group efforts toward fulfilling the role of nursing in the institution.

**Differentiating Between Managers and Leaders**

Zaleznik (1981), in differentiating between managers and leaders, identifies the manager as a problem solver. The successful manager must be persistent, tough minded and possess the capability to use intelligence and analytical abilities well. Leaders are able to use these characteristics as well as being able to project their ideas and aspirations to others in a way that excites them.

Krechel (1983) views the manager, a careerist, as worrying about "how am I doing." The manager functions by getting people to work for only money or out of fear. The leader is devoted to getting the job done by encouraging the workers to harmonize their goals with those of the organization.

Comparing a manager and a leader, Douglass and Bevis (1983) viewed the manager as having official authority and responsibility in overseeing and directing the work of others through use of position in the organization. Managers execute directives, plans, and policies of a
governing board. Leaders have their authority through the characteristics and behavior they exhibit, rather than official designation. The leaders promote an atmosphere of cooperation and respect of their fellow workers, who in turn are willing to be influenced by the leader. As Douglass and Bevis (1983) state: "A manager may be a leader and a leader a manager, but some managers are not good leaders and not all leaders are managers at all" (p. 48).

Nurse Administrators

Today's nurse administrator requires skills in a wide variety of areas: leadership, business management, communication, budgeting, as well as advanced clinical nursing (Hansen, 1982; Stevens, 1980). In order to acquire all these skills, the nurse administrator must be well educated and have a wide variety of experiences. This individual needs to exhibit competence in a number of areas: clinical nursing skills, research, effective communication, and decision-making skills. In addition, this individual must have a working knowledge of leadership styles, financial planning, employer-employee relationships, management theory, and health care delivery systems. The nurse administrator must also possess knowledge of current
issues in health care and their ramifications on nursing (Hansen, 1982).

Stevens (1980) states that the nurse administrator today must have a good understanding of the bureaucratic mode of management in order to function effectively. In addition, this individual must remain proficient in administering sophisticated nursing care. Inherent in this position is the need to combine two major disciplines--nursing and management. To approach nursing management without the proper balance between these will result in the nursing administrator failing to accomplish the objective of nursing administration, which is to control what happens in the department of nursing.

Only one study was found which identified the temperament type of nurses. It was an attempt to measure the effect of education on nurses in a pediatric nurse practitioner program. The Myers-Briggs Type Indicator was used to gauge the change in the attitudes of the nurses involved. As students, these individuals tended to be more introverted, more perceptive, and externally controlled. As practitioners one year later, they had reverted back to their previous attitudes, of being more extroverted, not as perceptive, and internally controlled (Bruhm, Floyd & Bunce, 1978).
Summary

Although there are numerous articles describing the traits and characteristics of an administrator, there is not a consensus of those found in top nurse managers. Those traits identified in one study are sometimes diametrically opposed to those found in another (Merton, 1969). Therefore, further research is needed to begin the process of analyzing the traits necessary for nurse managers. Once this has been accomplished, methods can be developed to assist future managers to develop these behavioral traits.
CHAPTER III

METHODOLOGY

Introduction

The first chapter outlined the importance of continuing to research what qualities are necessary for an effective leader and manager. The theoretical framework was also explored, which provided guidance and support for the research effort. Chapter II presented the relevant literature available on the traits of leaders and managers. The findings of the literature review revealed no clear profile of the qualities or traits of a nurse administrator from which to launch an indepth study of the necessary qualities of nurse administrators. This chapter will discuss the research design, population and sampling technique, instrumentation, data collection, data analysis and methodological limitations of this research study.

Research Design

The research design used in this study was a descriptive exploratory survey to identify the temperament types of nurse administrators in the State of Texas. The purpose of a descriptive exploratory survey is to describe
the present situation, and to provide data helpful in shaping the design and focus of later research efforts (Polit & Hungler, 1978). This research study is the initial step in the development of a profile of temperament types of nurse administrators, from which further research can take place to isolate individual qualities and then to develop a method of providing prospective nurse administrators with the opportunity to gain the experiences necessary to develop these qualities.

Population

The population for this research study was the nurse administrators of hospitals with a bed capacity of 200 beds or more in the State of Texas. Nurse administrators making up the sample were those nurses in top management positions in hospital nursing service. To identify the sample population, a list of hospitals was obtained from the Texas Department of Health, Hospital and Professional Licensure Division. From this list, the hospitals meeting the criterion were divided according to the twelve Health Service Areas in Texas to provide a means for equal representation of the sample group in the state (see Appendix A for a map of the twelve Health Service Areas). No consideration was given to these hospitals regarding their funding sources, private, public, or federal.
A total of one hundred hospitals were identified that met the criterion of 200 beds or more. Three survey packets were mailed to the top nurse administrator in each hospital for distribution. The total number of possible participants was 300.

**Ethical Consideration**

The instrument package was mailed to the nurse administrator of the selected hospitals. The questionnaires in the packets were identified only according to the health service area. In order to preserve the anonymity and confidentiality of the subjects no further identification was used. The questionnaires were to be returned separately from the request for an abstract of the study. Consent to take part in the research study was evidenced by the individual in completing and returning the instrument packet to the investigator.

**Instrumentation**

The instrument used to collect data for this descriptive survey was a short four-item demographic data questionnaire and the seventy-item Keirsey Temperament Sorter (see Appendix B for the survey instrument). The Keirsey Temperament Sorter was developed from the Myers-Briggs Type Indicator (Keirsey & Bates, 1978). The Myers-Briggs
Type Indicator reflects the Jung theory of personality types (Myers, 1962). Reliability data was supplied by Keirsey (personal communication, 1983) and Wolf (personal communication, 1983) of B & D Books, a producer of the sorter for use by interested professionals; it is reliable 75% of the time to accurately identify the temperament types of those completing the sorter. The Keirsey Temperament Sorter provides a four letter combination based upon Jung's theory, which can then be matched to published summaries of temperament types. There are sixteen possible types (see Appendix C for the sixteen temperament types).

**Data Collection**

The instrument package was mailed to the nurse administrators of the hospitals of the sample population. A cover letter to the director of nursing introduced the investigator, explained the purpose of the research project, requested assistance in completing a packet and distributing the other two packets to nurse administrators in the hospital (see Appendix D for letter to Director of Nursing). The individual instrument packets included a cover letter, a demographic data sheet, and the Keirsey Temperament Sorter. The cover letter to the packets introduced the researcher, explained the purpose of the research project and stated that the identity of the
individual completing the demographic data sheet and the Keirsey Temperament Sorter would be kept confidential and anonymous (see Appendix K for cover letter). Consent to take part in the survey is evidenced by the individual in completing the instrument package and returning it to the researcher. Included was a stamped postcard for the nurse administrator to complete if they desired an abstract of the study. This was to be mailed back separately to the researcher.

The desired return rate from five of the twelve areas was not achieved by the date requested for returning the instrument. This required a follow-up mailing to the directors of nursing of the hospitals in these five Health Service Areas in order to attain the desired return rate from each service area. The desired return rate was operationally defined as a 50% return of the questionnaires mailed to each Health Service Area to assure adequate representation from each area.

Data Analysis

Descriptive statistics was used to describe the information gathered from the demographic data and the results of the Keirsey Temperament Sorter. The respondents' answers were transferred to the scoring sheet for the Keirsey Temperament Sorter. The temperament types were
then determined by adding the checks in each column, to identify the predominant type of the four pairs of psychological types (see Appendix F for a copy of the answer sheet). Research questions one and two were analyzed using frequency techniques (Polit & Hungler, 1978). These techniques included tabulating the answer sheets in order to summarize and describe the data obtained from the survey instrument. An inferential statistic, chi-square, was used to answer research question number three. The chi-square, a non-parametric test, analyzed the groupings of nominal data for significant difference at the .05 level (Isaac & Michael, 1982; Polit & Hungler, 1978).

**Methodological Limitations**

The methodological limitations of this study were:

1. Use of the survey technique prevented any clarification of the directions for completing the instrument or for the intent of the survey (Isaac & Michael, 1981).

2. There was no assurance that the respondent was a nurse administrator (Isaac & Michael, 1981).

3. The Keirsey Temperament Sorter has been used previously to identify the temperament types of nurses but not nurse administrators (Keirsey & Bates, 1978).
Summary

The research design used in this study was a descriptive exploratory survey, to identify the temperament types of the nurse administrators in the State of Texas. Three instrument packets were mailed to the nurse administrators of nursing service of hospitals with a bed capacity of 200 beds or more in the State of Texas. The one hundred hospitals identified that met this criterion were divided according to the twelve Health Service Areas to provide a means for equal representation of the sample group in the State of Texas.

The data were collected using the Keirsey Temperament Sorter, and the demographic data sheet. After the instrument packets were returned, the information was compiled and subjected to frequency analysis to answer research questions one and two, and chi-square was used to answer research question number three. Chapter IV presents the results of the analysis of the data.
CHAPTER IV

RESULTS

Introduction

The intent of this research study was to explore the temperament types of nurses currently in top management positions in hospital nursing service. This chapter describes the characteristics of the sample population and presents the research findings.

Characteristics of the Sample

Nurse administrators in the State of Texas were the population from which the sample group was selected for this study. To ensure equal representation of nurse administrators, the subjects were selected from hospitals in the twelve Health Service Areas that had a bed capacity of 200 beds or more. There were a total of 99 hospitals that met this criterion. In Table 1, the number of hospitals in each of the twelve Health Service Areas are presented. The total number of instruments sent out to nurse administrators, the number returned and the percentage of those returned are also presented in Table 1. The overall return rate for this study was 64.6%, with 10 of the 12 areas having a
TABLE 1

NUMBER OF HOSPITALS, TOTAL SURVEYS MAILED, AND RATE OF RETURN ACCORDING TO HEALTH SERVICE AREA

<table>
<thead>
<tr>
<th>Health Service Area</th>
<th>Number of Hospitals</th>
<th>Number of Surveys Sent Out</th>
<th>Number of Surveys Returned</th>
<th>Percentage Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>88.8</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>66.6</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>18</td>
<td>7</td>
<td>38.8</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>15</td>
<td>8</td>
<td>53.3</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>57</td>
<td>37</td>
<td>64.9</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>21</td>
<td>15</td>
<td>71.4</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>15</td>
<td>15</td>
<td>100.0</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>24</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>24</td>
<td>16</td>
<td>66.6</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>21</td>
<td>13</td>
<td>61.9</td>
</tr>
<tr>
<td>11</td>
<td>27</td>
<td>81</td>
<td>50</td>
<td>61.7</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>66.6</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>297</td>
<td>192</td>
<td>64.6</td>
</tr>
</tbody>
</table>
return rate of at least 60%. Area 7 had a return rate of 100%. Area 3's return rate was less than 50% (38.8%) due to one hospital of the six identified hospitals declining to distribute the instrument to nurse administrators of that hospital. In addition, subjects in Area 3 did not respond after the second mailing.

Table 2 shows the responses according to the position held by the respondent in nursing service. The majority of responses were from the directors of nursing of the hospitals. The second largest response rate was from directors of special care areas, such as the operating room, critical care, the medical and surgical nursing. There were seven respondents that did not complete all the items listed on the demographic data sheet. The data provided, however, were included in the final data analysis.

<table>
<thead>
<tr>
<th>POSITION IN NURSING SERVICE</th>
<th>NUMBER OF RETURNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Nursing</td>
<td>67</td>
</tr>
<tr>
<td>Assistant Director of Nursing</td>
<td>38</td>
</tr>
<tr>
<td>Director of Special Area</td>
<td>48</td>
</tr>
<tr>
<td>Supervisors</td>
<td>9</td>
</tr>
<tr>
<td>Nurse Administrator</td>
<td>16</td>
</tr>
<tr>
<td>Nurse Manager</td>
<td>3</td>
</tr>
<tr>
<td>Head Nurse</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 3 displays the response rate according to the size of the hospital where the nurse administrators are employed. The largest response rate was from nurse administrators employed at hospitals with a bed capacity of 200-400 beds.

TABLE 3
RESPONSE ACCORDING TO HOSPITAL SIZE

<table>
<thead>
<tr>
<th>Bed Capacity</th>
<th>Responses</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>200- 400</td>
<td>122</td>
<td>65.5</td>
</tr>
<tr>
<td>401- 600</td>
<td>44</td>
<td>23.6</td>
</tr>
<tr>
<td>601-1,000</td>
<td>13</td>
<td>6.9</td>
</tr>
<tr>
<td>1,000-More</td>
<td>7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

The basic nursing education of the respondents was as follows: 11.0% have an Associate Degree (A.D.); 52.6%, a Diploma, and 36.3%, a Bachelor of Science degree in Nursing (BSN). One respondent has a Master of Science degree.

Thirty-one of the A.D. and diploma graduates indicated they returned to school to attain a BSN. Twenty-four respondents had attained a baccalaureate degree in another field. Of those with a Master's degree, 39 have a Master of Science in Nursing, and 18 hold a Master's degree in another field of study. A total of five respondents hold doctorates, four Ph.D.s and one Ed.D.
Of the total respondents, 182 were female and 10 were male. Seven of the males were employed in the hospitals with a bed capacity of 200-400. Four of the males held positions as director of nursing or the equivalent, four were assistant directors of nursing and the other two were directors of special areas.

Finding

The subjects' responses to the Keirsey Temperament Sorter were tabulated and placed in tables. Table 4 presents data to answer research question number one: What are the temperament types of nurse administrators of hospital nursing service in Texas as measured by the Keirsey Temperament Sorter? There were 148 subjects whose responses to the Keirsey Temperament Sorter provided an identifiable temperament type. Forty-four subjects' responses to the Keirsey Temperament Sorter did not provide an identifiable temperament type. Of these 44 subjects, 38 did not differentiate one pair of types; five two pairs of types; and one three pairs of types.

Of the subjects (N = 38) that did not differentiate between one pair of temperament types, 10 did not differentiate between extroversion and introversion (E-I); 10 between sensation and intuition (S-N); 15 between thinking and feeling (T-F), and three between judging and perceiving
Of the subjects (N = 5) that did not differentiate between two pairs of temperament types, two did not differentiate between E-I and S-N, one between E-I and T-F, one between S-N and T-F, and one between S-N and J-P.

TABLE 4
FREQUENCY AND PERCENTAGE OF THE TEMPERAMENT TYPES OF NURSE ADMINISTRATORS SURVEYED IN THE STATE OF TEXAS (N = 192)

<table>
<thead>
<tr>
<th>Temperament Type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTJ</td>
<td>66</td>
<td>34.37</td>
</tr>
<tr>
<td>ISTJ</td>
<td>20</td>
<td>10.41</td>
</tr>
<tr>
<td>ENTJ</td>
<td>15</td>
<td>7.81</td>
</tr>
<tr>
<td>ESFJ</td>
<td>12</td>
<td>6.25</td>
</tr>
<tr>
<td>INFJ</td>
<td>1</td>
<td>0.52</td>
</tr>
<tr>
<td>INTJ</td>
<td>3</td>
<td>1.56</td>
</tr>
<tr>
<td>ENFP</td>
<td>9</td>
<td>4.68</td>
</tr>
<tr>
<td>ENFJ</td>
<td>8</td>
<td>4.16</td>
</tr>
<tr>
<td>ENTP</td>
<td>5</td>
<td>2.60</td>
</tr>
<tr>
<td>ISFJ</td>
<td>7</td>
<td>3.64</td>
</tr>
<tr>
<td>ESTP</td>
<td>1</td>
<td>0.52</td>
</tr>
<tr>
<td>ISFP</td>
<td>1</td>
<td>0.52</td>
</tr>
<tr>
<td>INTP</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>ESFP</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>INFP</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>ISTP</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>44</td>
<td>22.91</td>
</tr>
</tbody>
</table>
As indicated in Table 4, the temperament type of Extroversion, Sensation, Thinking, and Judging (ESTJ) was the predominant temperament type of nurse administrators taking part in this study. This answered research question number two. ESTJ types represented 34.37% of the total instruments returned.

The distribution of temperament types according to reported nursing administrative positions is displayed in Table 5. A total of five respondents did not indicate an administrative position and 43 respondents who did identify an administrative position did not fully identify a particular temperament type.

The chi-square statistical procedure was applied to analyze the data in order to answer research question number three: Is there a significant difference in the temperament types of nurse administrators? The chi-square analysis \( (X^2 = 342.33) \) supports a positive response to question number three at the .05 level of significance: Yes, there is a significant difference in the temperament types of nurse administrators surveyed in the State of Texas.

**Summary**

The total number of responses to this descriptive exploratory research study was 192, representing a 64.6%
### TABLE 5

**TEMPERAMENT TYPES ACCORDING TO POSITION**

<table>
<thead>
<tr>
<th>Temperament Type</th>
<th>Stated Administrative Position*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>ESTJ</td>
<td>30</td>
</tr>
<tr>
<td>ISTJ</td>
<td>6</td>
</tr>
<tr>
<td>ENTJ</td>
<td>6</td>
</tr>
<tr>
<td>ESFJ</td>
<td>1</td>
</tr>
<tr>
<td>INFJ</td>
<td>1</td>
</tr>
<tr>
<td>INTJ</td>
<td>1</td>
</tr>
<tr>
<td>ENFP</td>
<td>4</td>
</tr>
<tr>
<td>ENFJ</td>
<td>2</td>
</tr>
<tr>
<td>ENTP</td>
<td>1</td>
</tr>
<tr>
<td>ISFJ</td>
<td>1</td>
</tr>
<tr>
<td>ESTP</td>
<td>1</td>
</tr>
<tr>
<td>ISFP</td>
<td>1</td>
</tr>
<tr>
<td>INTP</td>
<td>1</td>
</tr>
<tr>
<td>ESFP</td>
<td>1</td>
</tr>
<tr>
<td>INF             1</td>
<td></td>
</tr>
<tr>
<td>ISTP</td>
<td>1</td>
</tr>
<tr>
<td>Undetermined</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
</tr>
</tbody>
</table>

*Stated Position

1. Director of Nursing
2. Assistant Director of Nursing
3. Director of Special Area
4. Supervisor
5. Nurse Administrator
6. Nurse Manager
7. Head Nurse
8. Position Not Stated
return rate. A majority of those responding were: female, affiliated with a hospital of 200-400 beds, and held the position of directors of nursing or the equivalent. The temperament types of nurse administrators of hospital nursing service in hospitals with a bed capacity of 200 beds or more were identified. The ESTJ type was identified as the predominant temperament type for nurse administrators in hospital nursing service in Texas as measured by the Keirsey Temperament Sorter. The results of the chi-square test indicated a significant difference in the temperament types of nurse administrators taking part in this study. Conclusions and recommendations drawn from the data are presented in Chapter V.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This descriptive research study was conducted to begin the development of a profile of the traits of nurse administrators. To accomplish this, the traits of current nurse administrators must be identified. The purpose of this study was to identify the temperament types of nurse administrators of Texas hospitals with a bed capacity of 200 beds or more using the Keirsey Temperament Sorter. The methodology used to conduct this study was a descriptive exploratory survey.

The findings of the descriptive exploratory research study, based on a total return rate of 64.6%, indicate that the majority of the nurse administrators responding to the survey were one of four temperament types--Extroversion, Sensation, Thinking, and Judging (ESTJ); Introversion, Sensation, Thinking, and Judging (ISTJ); Extroversion, Intuition, Thinking and Judging (ENTJ); and Extroversion, Sensation, Feeling and Judging (ESFJ). Twelve of the 16 possible temperament types were found among the sample population. The ESTJ type was identified as the
predominant temperament type identified. It was further
determined using chi-square statistical analysis
($X^2 = 342.33$), that a significant difference does exist
in the temperament types of nurse administrators in the
State of Texas.

Interpretation and Conclusions

The temperament types of nurse administrators of
Texas hospitals with a bed capacity of 200 beds or more
were identified using the Keirsey Temperament Sorter to
answer research question number one. Only four out of a
possible 16 temperament types were not found, indicating a
variety of temperament types in nurse administrators.

In answer to research question number two, the pre-
dominant temperament type of nurse administrators of
hospital nursing service of hospitals with a bed capacity of
200 beds or more was ESTJ. Although a variety of temperament
types were found, 66 of the 192 responses (34.37%) were
identified as the ESTJ temperament types. The ISTJ
temperament type was identified on 20 instruments, the
ENTJ temperament type was found on 15 instruments, and 12
instruments identified the ESFJ temperament type. The other
eight temperament types were identified on less than ten
instruments.
Keirsey and Bates indicate that the ESTJ temperament type is found in 13% of the general population. Individuals with this temperament type respect tradition and rituals, follow set work routines and resist change of these routines. ESTJs are cornerstones of their communities, dependable, responsible, consistent, and straightforward in dealing with people. These individuals generally feel duty-bound and do not shirk from responsibilities. ESTJs approach situations and problems with a realistic, matter-of-fact manner. This type of individual feels comfortable in evaluating others in terms of standard operating procedures and the accepted way of doing things. ESTJs can sometimes be unresponsive to the emotions and the views of others. Another trait of ESTJs is the tendency to be neat and orderly in all activities.

A majority of the nurse administrators with the ESTJ temperament type were found in the position of director of nursing or equivalent positions. This indicates that those individuals in nursing with this temperament type will more likely be found in nurse administrative positions in hospital nursing service than the other temperament types. However, the chi-square statistical analysis of the data to answer research question three indicated that there was a significant difference in the temperament types of nurse administrator even though one type (ESTJ) predominates.
Nursing Implications

As the result of this research study the general characteristics of nurse administrators have been identified. By exploring the general profiles of the temperament types identified in this study, a broad profile of the nurse administrators of hospitals with a bed capacity of 200 beds or more can be developed. This broad profile can serve as the basis for further research on the traits of nurse administrators.

Based on profiles developed by Keirsey and Bates (1978) for each of the temperament types, nurse administrators with the ESTJ temperament type can be expected to display preference for the actions that correspond to the individual types which combine to form the temperament type. Each of the component types will be discussed in relation to nurse administrators.

A nurse administrator with the extroversion (E) component type would be an individual who enjoys contact with people and needs to be sociable. Talking to people and working with people energizes an E. A nurse administrator with the E type dislikes working alone, and will seek contact with others frequently. An E type individual prefers being informed on a broad range of subjects whereas an introvert would prefer to have an in-depth knowledge of different topics.
The component type of sensation (S) indicates a preference for being sensible or practical. An individual with this type believes in facts, trusts and remembers facts. The S type values experience and the wisdom of the past. An individual with this type is oriented toward reality and the issues at hand. An S tolerates little or no nonsense in others, and is very accurate in observing details. S's have a tendency to ignore hunches, which in turn hinders the creative processes of an individual. Often an individual with the S type appears to others as being plodding and exasperatingly slow to accept new ideas.

The thinking (T) type are individuals who tend to be impersonal in making choices. A T type individual tends to follow standard operating procedures and written policies. Individuals with the T type prefer to view life logically and objectively. The T type of individual prefers to make decisions based on principles and on objective data. These individuals are sometimes viewed as being heartless, cold, unemotional and remote.

The last type of the components to make up the ESTJ temperament type is judging. A judging (J) individual prefers to get decisions made and feels a sense of urgency until the decision is made. These individuals tend to set deadlines and expect them to be met by all involved. The
J's tend to have the work ethic of work before pleasure. J's are described as driven, task oriented, rigid and inflexible, arbitrary and premature in planning and decision making.

Nurse administrators with the ESTJ temperament type need to be aware of the preferences of the temperament type. These preferences can be countered by consulting nurses with the other temperament types with an open mind toward the value of approaching nursing from different perspectives.

Based on the profiles of the individual component types which combine to form the temperament types (Keirsey and Bates, 1978), would nursing be better served with an Extroversion (E), Sensation/Intuition (S-N), Thinking (T), and Judging (J) temperament type managing nursing? The E-TJ temperament type would display the same preferences as the ESTJ temperament type in relation to the E, T, and J component types. The sensation (S) component would be balanced by an equal tendency toward intuition (N). An individual unable to differentiate between sensation/intuition (S-N) would display some of the preferences outlined for an S, as well as additional actions associated with N. An individual with an N type displays a vivid imagination and has developed the use of inspiration, hunches and ingenuity. With the balance of sensation and
intuition the individual would respect tradition and the practical approach to problems but also can use inspiration and ingenuity to meet the problems encountered in nursing.

The results of the research study indicate that a predominant temperament type (ESTJ) does exist in nurse administrators surveyed. Therefore, nursing needs to evaluate if the ESTJ temperament type is the right temperament type to be managing nursing practice. If it is determined that this temperament type is the most effective manager in nursing, then a method for identification and placement of nurses with this temperament type needs to be developed.

Although this study did not obtain adequate data to identify the temperament type of nurse administrators in general, 30 of the 53 directors of nursing were identified as having the ESTJ temperament type. Therefore, the temperament type of director of nursing can be expected, in the majority of cases, to be this type for hospitals with a bed capacity of 200 beds or more. With the ESTJ temperament type as the predominant type, the process of introducing innovative change in providing nursing care can be expected to be a long, difficult task.

Twelve of the 16 possible temperament types were identified in nurse administrators, indicating that there
are differences in temperament types of nurse administrators. However, the data analysis indicated that the ESTJ was the predominant temperament type. Sixty-six of the 192 respondents were identified by the Keirsey Temperament Sorter as being ESTJ which represents only 34.37% of the sample group.

Using this information there is no reason to exclude any particular temperament type from pursuing a career in nursing administration. Twelve of the 16 possible temperament types were identified in nurse administrators of nursing service in hospitals with a bed capacity of 200 beds or more in the State of Texas.

Recommendations

As the result of this research study the following recommendations are made:

1. This study needs to be replicated on a larger scale in other geographical areas to enable comparisons of results. This would give the results greater validity.

2. Further research is needed to identify successful nurse administrators and to compare their temperament types to those found in nurse administrators in this study. Once the temperament type of successful nurse administrators
has been identified, that type can then serve as a profile to base in-depth studies to determine the traits or combination of traits needed by the successful nurse administrator.
APPENDIX A

HEALTH SERVICE AREAS MAP
APPENDIX B

SURVEY INSTRUMENT
SURVEY INSTRUMENT

TEXAS HEALTH SERVICE AREA _____

DEMOGRAPHIC DATA:

NURSING ADMINISTRATIVE POSITION ____________________________

SIZE OF HOSPITAL: 200 - 400 _____
401 - 600 _____
601 - 1000 _____
1001 - More _____

BASIC NURSING EDUCATION ATTAINED:

A.D. _____
DIPL. _____
BSN. _____

ADVANCED DEGREES ATTAINED:

Baccalaureate

BSN. _____
Other _____
(Please List Area) ____________________________

Masters Degree

Nursing _____
Other _____
(Please List Field) ____________________________

Doctorate

Ph.D. _____
Ed.D. _____
D.S.N. _____
Other _____
(Please Specify Area) ____________________________

Male _____ Female _____
THE KEIRSEY TEMPERAMENT SORTER

Please complete the following questionnaire. Circle your choice--either a. or b. If you really cannot choose, each answer being equally good or bad for you, then leave that question unanswered and go on to the next. There are no right or wrong answers.

1. At a party do you
   a. interact with many, including strangers
   b. interact with a few, known to you

2. Are you more
   a. realistic than speculative
   b. speculative than realistic

3. Is it worse to
   a. have your "head in the clouds"
   b. be "in a rut"

4. Are you more impressed by
   a. principles
   b. emotions

5. Are you more drawn toward the
   a. convincing
   b. touching

6. Do you prefer to work
   a. to deadlines
   b. just "whenever"

7. Do you tend to choose
   a. rather carefully
   b. somewhat impulsively

8. At parties do you
   a. stay late, with increasing energy
   b. leave early, with decreased energy

9. Are you more attracted to
   a. sensible people
   b. imaginative people

10. Are you more interested in
    a. what is actual
    b. what is possible
11. In judging others are you more swayed by
   a. laws than circumstances
   b. circumstances than laws

12. In approaching others is inclination to be somewhat
   a. objective
   b. personal

13. Are you more
   a. punctual
   b. leisurely

14. Does it bother you more having things
   a. incomplete
   b. completed

15. In your social groups do you
   a. keep abreast of other's happenings
   b. get behind on the news

16. In doing ordinary things are you more likely to
   a. do it the usual way
   b. do it your own way

17. Writers should
   a. "say what they mean and mean what they say"
   b. express things more by the use of analogy

18. Which appeals to you more
   a. consistency of thought
   b. harmonious human relationships

19. Are you more comfortable in making
   a. logical judgments
   b. value judgments

20. Do you want things
   a. settled and decided
   b. unsettled and undecided

21. Would you say you are more
   a. serious and determined
   b. easy-going

22. In phoning do you
   a. rarely question that it will all be said
   b. rehearse what you'll say
23. Facts
   a. "speak for themselves"
   b. illustrate principles

24. Are visionaries
   a. somewhat annoying
   b. rather fascinating

25. Are you more often
   a. a cool-headed person
   b. a warm-hearted person

26. Is it worse to be
   a. unjust
   b. merciless

27. Should one usually let events occur
   a. by careful selection and choice
   b. randomly and by chance

28. Do you feel better about
   a. having purchased
   b. having the option to buy

29. In company do you
   a. initiate conversation
   b. wait to be approached

30. Common sense is
   a. rarely questionable
   b. frequently questionable

31. Children often do not
   a. make themselves useful enough
   b. exercise their fantasy enough

32. In making decisions do you feel more comfortable with
   a. standards
   b. feelings

33. Are you more
   a. firm than gentle
   b. gentle than firm

34. Which is more admirable:
   a. the ability to organize and be methodical
   b. the ability to adapt and make do
35. Do you put more value on the
   a. definite
   b. open-ended

36. Does new and non-routine interaction with others
   a. stimulate and energize you
   b. tax your reserves

37. Are you more frequently
   a. a practical sort of person
   b. a fanciful sort of person

38. Are you more likely to
   a. see how others are useful
   b. see how others see

39. Which is more satisfying:
   a. to discuss an issue thoroughly
   b. to arrive at agreement on an issue

40. Which rules you more:
   a. your head
   b. your heart

41. Are you more comfortable with work that is
   a. contracted
   b. done on a casual basis

42. Do you tend to look for
   a. the orderly
   b. whatever turns up

43. Do you prefer
   a. many friends with brief contact
   b. a few friends with more lengthy contact

44. Do you go more by
   a. facts
   b. principles

45. Are you more interested in
   a. production and distribution
   b. design and research

46. Which is more of a compliment:
   a. "There is a very logical person."
   b. "There is a very sentimental person."
47. Do you value in yourself more that you are
   a. unwavering
   b. devoted

48. Do you more often prefer the
   a. final and unalterable statement
   b. tentative and preliminary statement

49. Are you more comfortable
   a. after a decision
   b. before a decision

50. Do you
   a. speak easily and at length with strangers
   b. find little to say to strangers

51. Are you more likely to trust your
   a. experience
   b. hunch

52. Do you feel
   a. more practical than ingenious
   b. more ingenious than practical

53. Which person is more to be complimented: one of
   a. clear reason
   b. strong feeling

54. Are you inclined more to be
   a. fair-minded
   b. sympathetic

55. Is it preferable mostly to
   a. make sure things are arranged
   b. just let things happen

56. In relationships should most things be
   a. renegotiable
   b. random and circumstantial

57. When the phone rings do you
   a. hasten to get to it first
   b. hope someone else will answer

58. Do you prize more in yourself
   a. a strong sense of reality
   b. a vivid imagination
59. Are you drawn more to
   a. fundamentals
   b. overtones

60. Which seems the greater error:
   a. to be too passionate
   b. to be too objective

61. Do you see yourself as basically
   a. hard-headed
   b. soft-hearted

62. Which situation appeals to you more:
   a. the structured and scheduled
   b. the unstructured and unscheduled

63. Are you a person that is more
   a. routinized than whimsical
   b. whimsical than routinized

64. Are you more inclined to be
   a. easy to approach
   b. somewhat reserved

65. In writings do you prefer
   a. the more literal
   b. the more figurative

66. Is it harder for you to
   a. identify with others
   b. utilize others

67. Which do you wish more for yourself
   a. clarity of reason
   b. strength of compassion

68. Which is the greater fault:
   a. being indiscriminate
   b. being critical

69. Do you prefer the
   a. planned event
   b. unplanned event

70. Do you tend to be more
   a. deliberate than spontaneous
   b. spontaneous than deliberate

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APPENDIX C

BRIEF DESCRIPTIONS OF THE SIXTEEN TYPES
BRIEF DESCRIPTIONS OF THE SIXTEEN TYPES

ENTJ - Intuitive, innovative organizer; aggressive, analytic, systematic; more tuned to new ideas and possibilities than to people's feelings.

ESTJ - Fact-minded, practical organizer; aggressive, analytic, systematic; more interested in getting the job done than in people's feelings.

INTP - Inquisitive analyzer; reflective, independent, curious, more interested in organizing ideas than situations or people.

ISTP - Practical analyzer; values exactness, more interested in organizing data than situations or people; reflective, cool and curious observer of life.

ESTP - Realistic adapter in the world of material things; good-natured, tolerant, easy with people, highly observant of their feelings and needs; oriented to practical first-hand experience.

ESFP - Realistic adapter in human relationships; friendly and easy with people, highly observant of their feelings and needs; oriented to practical, first-hand experience.

ISTJ - Analytical manager of facts and details; dependable, decisive, painstaking and systematic; concerned with systems and organization; stable and conservative.

ISFJ - Sympathetic manager of facts and details; concerned with peoples' welfare; dependable, painstaking and systematic; stable and conservative.

ISFP - Observant, loyal helper; reflective, realistic, empathic; patient with details, gentle and retiring; shuns disagreements; enjoys the moment.

INFP - Imaginative, independent helper; reflective, inquisitive, empathic, loyal to ideals; more interested in possibilities than practicalities.

ESFJ - Practical harmonizer and worker-with-people; sociable, orderly, opinioned; conscientious, realistic and well-tuned to the here and now.
ENFJ - Imaginative harmonizer and worker-with-people; sociable, expressive, orderly, opinioned, conscientious; curious about new ideas and possibilities.

INFJ - People-oriented innovator of ideas; serious, quietly forceful and persevering; concerned with the common good, with helping others develop.

INTJ - Logical, critical, decisive innovator of ideas; serious, intent, highly independent, concerned with organization, determined and often stubborn.

ENFP - Warmly enthusiastic planner of change; imaginative, individualistic; pursues inspiration with impulsive energy; seeks to understand and inspire others.

ENTP - Inventive, analytical planner of change; enthusiastic and independent; pursues inspiration with impulsive energy; seeks to understand and inspire others.

APPENDIX D

COVER LETTER TO DIRECTOR OF NURSING
January 3, 1984

Nurse Administrator
Metroplex Hospital
Metroplex, Texas

Dear Nurse Administrator:

I am a graduate student enrolled at The University of Texas at Arlington, School of Nursing. I have chosen to do a research project to fulfill the thesis requirements for graduation. This package represents the data collection portion of my research project.

The three enclosed packets are the actual data collection portion of my research project. I would appreciate your assistance in responding to one of the enclosed questionnaire packets and distributing the remaining packets to nurse managers at the top management level of nursing service in your hospital.

The packet consists of a cover letter, explaining the research project, a demographic information sheet, and the Keirsey Temperament Sorter. It is estimated that it will take approximately 20 minutes to respond to the survey questionnaire. Enclosed is a stamped, addressed envelope for your convenience in returning the completed questionnaire. It would be greatly appreciated to receive the completed questionnaire by January 23, 1984. If you are interested in the results of the survey and desire a copy of the abstract, please indicate this on the enclosed addressed postcard along with your name and address and mail it back separately. The information will be kept confidential, as will the identity of those taking part in the survey. Filling out and returning the questionnaire infers consent to take part in this research project.

Thank you for your assistance in the completion of my research project.

Sincerely,

Dennis Garvin
APPENDIX E

COVER LETTER TO PACKETS
January 3, 1984

Nurse Administrator
Metroplex Hospital
Metroplex, Texas

Dear Nurse Administrator:

I am a graduate student enrolled at The University of Texas at Arlington, School of Nursing. I have chosen to do a research project to fulfill the thesis requirements for graduation. This letter and accompanying questionnaire represent the data collection portion of my research project.

The research project is being conducted in the State of Texas. The sample population is made up of nurse administrators (nurse managers in top management) in hospitals with bed capacities of at least 200 beds. The project is a descriptive survey of temperament types of nurse administrators in hospitals. It is estimated that it will take approximately 20 minutes to respond to the survey questionnaire. Enclosed is a stamped, addressed envelope for your convenience in returning the completed questionnaire. It would be greatly appreciated to receive the completed questionnaire by January 23, 1984. If you are interested in the results of this survey and desire a copy, please indicate this on the enclosed address postcard along with your name and address and mail it back separately.

The information will be kept confidential, as will the identity of those taking part in the survey. Filling out and returning the questionnaire infers consent to take part in this research project. The information obtained will be used to identify the temperament type of those in nursing administration positions.

Thank you for your time and cooperation.

Sincerely,

Dennis Garvin
APPENDIX F

ANSWER SHEET FOR KEIRSEY TEMPERAMENT SORTER
Directions for Scoring the Keirsey Temperament Sorter:
Enter a check for each answer in the column corresponding
to the answer on the instrument. Add down each column,
write the total at the bottom. Transfer the number in
box No. 1 of the answer sheet to box No. 1 below the answer
sheet. Do the same for box No. 2. For the remaining boxes
bring down the first set of numbers for each pair of columns
beneath the second set as indicated by the arrows. Now add
all the vertical pairs of numbers and enter the total in
the boxes below the answer sheet, so each box has only one
number. Now you have four pairs of numbers. Circle the
letter below the larger number of each pair. If two numbers
of any pair are equal, circle neither, place an X below
them and circle it. The circle letters indicate the
temperament type. If an X is present you have a mixed type.
(Keirsey & Bates, 1978, pp. 11-12)

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