Personality Types of Registered Nurses Employed in a Rural Community Hospital

Tina Snodgrass

Western Kentucky University

Follow this and additional works at: http://digitalcommons.wku.edu/theses

Part of the Nursing Commons, and the Personality and Social Contexts Commons

Recommended Citation

http://digitalcommons.wku.edu/theses/357

This Thesis is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Masters Theses & Specialist Projects by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.
PERSONALITY TYPES OF REGISTERED NURSES EMPLOYED IN A
RURAL COMMUNITY HOSPITAL

A Thesis
Presented to
the Faculty of the Department of Nursing
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Nursing

by
Tina L. Snodgrass
December 1997
PERSONALITY TYPES OF REGISTERED NURSES EMPLOYED IN A RURAL COMMUNITY HOSPITAL

Date Recommended 6/11/97

Mary E. Hazzard
Director of Thesis
Cemessa R. Williams
Donna S. Blackmon

Elsner Kent 9/2/97
Director of Graduate Studies  Date
ACKNOWLEDGMENTS

I wish to express my gratitude to many individuals who have contributed to the completion of this thesis by giving their time and support. Special appreciation is extended to Dr. Mary Hazzard, my committee chairperson, Dr. Eileen Williams and Donna Blackburn, committee members. Without their expert guidance, patience, and inspiration, this project would not have been successful. Special acknowledgments are due to the hospital’s administration and board for their support in this research. To the nurses who volunteered to participate, I express a sincere thank you for their time.

My family has always formed a foundation of love and support that I can always rely upon. My husband, Greg, whose encouragement and handling of family responsibilities has made my endeavor possible. My wonderful children, Miles and Maegan, whose patience and willingness to be cooperative allowed me to complete my degree. My mother, Cordia Fields Keel, who spent this summer caring for my family and home so that I could complete my education within stringent time-lines. My in-laws, Paige and Dois Snodgrass, who have supported me throughout my education. And, my friends, Renona Browning and Dale Bartlett, whose support and encouragement were invaluable.

This work is dedicated to the memory of my father, Carl Fields, whose love for me and his belief in my ability has always been a motivating force in my life.
TABLE OF CONTENTS

ACKNOWLEDGMENTS.................................................................................................................. iii
LIST OF APPENDIXES................................................................................................................ vi
LIST OF TABLES.......................................................................................................................... vii
ABSTRACT....................................................................................................................................... viii

Chapter                      Page

I. INTRODUCTION. ................................................................. 1
   Purpose................................................................................. 3
   Research Questions.......................................................... 3
   Relevant Terms..................................................................... 4
   Assumptions......................................................................... 5
   Summary.............................................................................. 5

II. LITERATURE REVIEW.......................................................... 6
   Theoretical Literature......................................................... 6
      Jung’s Psychological Type Theory................................. 7
      Myers-Briggs Type Indicator Operationalizing Jung’s Theory........... 9
      Myers and Brigg’s Extensions to Jung’s Theory.................. 12
      Summary of Myers and Brigg’s Extensions to Jung’s Theory....... 15
   Relevant Research............................................................. 16
      Instruments Utilized in Measuring Personality Types of Nurses........ 17
      MBTI Data Bank Statistics.............................................. 19
      Researchers Utilizing the MBTI..................................... 20
III. METHODS ......................................................................................................................... 27

Research Design .................................................................................................................. 27
Setting .................................................................................................................................. 27
Sample .................................................................................................................................. 28
Procedure ............................................................................................................................. 28
Instrument ............................................................................................................................. 31
  Reliability .......................................................................................................................... 31
  Validity .............................................................................................................................. 33
Administration and Scoring of the MBTI ............................................................................. 35
Demographic Questionnaire ................................................................................................. 36
Data Analysis ....................................................................................................................... 36
Ethical Considerations ......................................................................................................... 36
Methodological Limitations ................................................................................................. 37
Communication of Findings ................................................................................................. 37

IV RESULTS .......................................................................................................................... 39

Description of Sample ......................................................................................................... 39
Findings .................................................................................................................................. 43
  Preferences on the MBTI ................................................................................................... 43
  Research Question 1 ......................................................................................................... 44
  Research Question 2 ......................................................................................................... 45
  Research Question 3 ......................................................................................................... 46
  Comparison of the Sample to a Base Population from the MBTI data bank .............. 48
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personality Types Identified Through the MBTI</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>Summary of Preferences Identified in the Literature Review</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>Distributions of Nurses by Age and Specialty Area</td>
<td>40</td>
</tr>
<tr>
<td>4</td>
<td>Distribution of Nurses According to Years in Nursing and Years in Specialty</td>
<td>42</td>
</tr>
<tr>
<td>5</td>
<td>Distribution of Nurses According to Current Degree Held</td>
<td>43</td>
</tr>
<tr>
<td>6</td>
<td>Distribution of Nurses According to Preferences for Dimensions on the MBTI</td>
<td>44</td>
</tr>
<tr>
<td>7</td>
<td>Distribution of Nurses According to MBTI Personality Types</td>
<td>45</td>
</tr>
<tr>
<td>8</td>
<td>Personality Types of Nurses Comprising All Specialty Areas Except Medical</td>
<td>47</td>
</tr>
</tbody>
</table>

Surgical
PERSONALITY TYPES OF REGISTERED NURSES EMPLOYED IN A
RURAL COMMUNITY HOSPITAL

Tina L. Snodgrass    December 1997    86 Pages

Directed by: Dr. Mary Hazzard, Dr. Eileen Williams, and Donna Blackburn

Department of Nursing    Western Kentucky University

ABSTRACT

The purpose of this study was to identify the personality types of registered nurses in a rural community. An extensive literature review revealed that no studies, utilizing the Myers-Briggs Type Indicator (MBTI) to identify personality types, had been conducted with rural nurses. Jung’s Psychological Type Theory was the theoretical framework for the study. The MBTI operationalizes Jung’s theory and was utilized to determine the most frequently occurring personality types of the nurses. A descriptive study was conducted at a 68 bed acute care hospital. The sample consisted of 40 experienced registered nurses working in staff positions within the hospital. Sensing, feeling, and judging were the preferred functions of the nurses, consistent with the expected tasks of the direct care giver. The greatest number of nurses were classified as ISFJ (N=9) followed by ENFP (N=6).
CHAPTER I
INTRODUCTION

Researchers have suggested that a relationship exists between certain personality characteristics and occupational choice for many years (Bohn, 1966; Chacko, 1991; Myers & McCaulley, 1985; Roe, 1956; Siegelman & Peck, 1960; Vitell, Wiebe, Singhapakdi, & Scherer, 1990). Counselors and advisors utilized personality type tools to help clients identify their individual type and the occupational choices that seemed to appeal to people of that particular type. It has been suggested that if people were aware of their type and made good occupational choices, there would be better job satisfaction and less staff turnover. According to type theory, certain occupations should attract particular types. Myers and McCaulley (1985) suggest that utilization of type theory in career counseling provides clients with an understanding of their interests which may help them to choose a satisfying career. However, Myers and McCaulley indicate that type theory does not imply that individuals with certain personality types should not enter certain professions. It serves to prevent major mismatches between personality and profession and helps people to understand that if they enter a certain profession their personality type may be in the minority.

Major personality type and occupational choice mismatches may explain why some professionals complete their educational requirements but go on later to pursue an entirely
different career which sometimes requires additional education. For example, nursing has been an occupation with a large number of qualified professionals choosing not to practice nursing. Other active nurses have changed specialty areas once or several times during their career before they found the appropriate area. If research helped us identify personality types of nurses in various speciality areas, individuals might be better equipped to make decisions regarding appropriate choice of specialty areas.

In addition to identifying what personality types enter certain professions, the Myers-Briggs Type Indicator (MBTI) has been used by management teams for several years by operationalizing Jung’s theory of psychological type and enlightening individuals on how their type interacts with others (Costello, 1993; Freeman, 1988; Freund, 1988). The MBTI has offered a way to build communication among managers and staff. Employees have a better understanding and appreciation toward other members of the team. Type theory has been used to open communication and understanding, prevent and resolve conflict, and motivate individuals (Myers & Myers, 1980/1995).

Although personality type has been studied for many years, there remains a need for more research focusing on and validating past studies within the nursing profession. Many of the studies in nursing used students rather than practicing professionals. More studies need to be done involving senior nurses (Cooper, Lewis, & Moores, 1976). There are a limited number of studies identifying the personality preferences of nurses in various specialty areas, and nursing researchers have called for more studies that identify preferences of nurses in specialized areas of practice (Amenta, 1984; Atkins & Piazza, 1987; Bean & Holcombe, 1993; Lentz & Michaels, 1965; Lewis, Bonner, Campbell,
Cooper, & Willard, 1994; Lukens, 1965; Reilly, 1989/1990). Specialized areas of practice require different skills. Thus, nurses in different specialty areas might have different personality types. There may also be one dominant preference among nurses. This commonality may be used to identify individuals who are more likely to be nurses and to match them with a specialty area.

**Purpose**

The purpose of this study was to identify the personality types of registered nurses practicing in a rural community. Most of the nurses were senior nurses that had been practicing in a rural community for longer than five years. Not only were they experienced senior nurses but they were also the first group of nurses practicing in a rural area to participate in a research study utilizing the MBTI to identify personality types. Identifying the personality types of rural nurses will add to the current body of knowledge regarding personality types of nurses. A descriptive study utilizing a convenience sample of 40 registered nurses was administered the MBTI.

**Research Questions**

Three research questions were postulated. They are as follows:

1. What are the most common personality types of registered nurses employed in a rural hospital, as identified by the MBTI?
2. What is the most common personality type of medical surgical nurses in a rural hospital?
3. What is the most common personality type of the other group of specialty areas in a rural hospital?
Relevant Terms

To fully understand the study, the usage of four terms must be defined. They are Myers-Briggs Type Indicator (MBTI), registered nurse, rural, and rural nursing.

*Myers-Briggs Type Indicator* (MBTI) - The MBTI is a self-report personality inventory which operationalizes the theory of psychological types developed by Carl G. Jung. It is based on Jung's ideas about the attitudes, perception, and judgment used by people of different types. The instrument has four scales: extraversion introversion (EI), sensation intuition (SN), thinking feeling (TF), and judging perceiving (JP). Personality preferences are identified by assigning one letter from each of the four poles. The four letters together are referred to as the personality type as identified by the MBTI.

*Registered Nurse* (RN) - The term nurse in this study is used to represent registered nurse unless otherwise specified. *Dorland's Illustrated Medical Dictionary* defines registered nurse as “a graduate nurse who has been legally authorized (registered) to practice after examination by a state board of nurse examiners or similar regulatory authority, and who is legally entitled to use the designation R.N.” (Taylor, Anderson, Patwell, Plaut, & McCullough, 1988, p. 1161)

*Rural* - The 1990 census defines rural as places outside urban territory meaning if it is not urban it is rural. According to the 1990 census, urban is defined as “comprising all territory, population, and housing units in urbanized areas and in places of 2,500 or more persons outside urbanized areas.” (p. A-11)

*Rural Nursing* - “Rural nursing is defined as the practice of professional nursing within the physical and sociocultural context of sparsely populated communities. It involves the
continual interaction of the rural environment, the nurse, and his or her practice.” (Bigbee, 1993, p.132)

Assumptions

This study is based on the following assumptions:

1. All people have preferences.
2. Preferences and type are innate.
3. Preferences are dichotomous.
4. A person prefers one preference over its opposite. However, a person has the potential to develop the skills related to all the preferences (Hartzler and Myers, 1995).

Summary

Understanding personalities is beneficial both personally and professionally. All professions require individuals to gather, process, use, and communicate knowledge. Understanding oneself and others is beneficial during communications. Personality affects one’s interactions with others. Some people, especially in nursing, thrive in their careers while others never find their specialty area fit, which could be related to the impact of personality on job fit. The following chapter contains the researcher’s discussion of the theoretical framework needed to understand personality, how it influences a person’s actions, and, also, provides examples of research related to nursing.
CHAPTER II
LITERATURE REVIEW

An extensive search of the literature revealed that within the last 10 years there was little research to be found relative to personality types of nurses. Furthermore, there is a limited amount of published research related to personality types of nurses and specialty choice. Regarding nurses practicing in rural areas, no research was found. Most studies are conducted in urban settings. The areas of literature reviewed for this investigation relate to psychological type theory and personality characteristics of nurses. Due to the fact there was a limited number of studies within the last 10 years, earlier research related to personality types of nurses, particularly studies utilizing the MBTI, are included in the literature review. This chapter includes two sections that contain discussion of relevant theoretical literature and relevant research.

Theoretical Literature

Jung’s theory of psychological types forms the theoretical framework utilized in this study. Jung’s theory was first translated into English in 1923 and operationalized by Briggs and Myers in 1962 with the Myers-Briggs Type Indicator (MBTI). This section includes discussion of Jung’s theory of psychological types and Briggs and Myers
extension of Jung’s theory, including the creation of the MBTI. Major concepts related to psychological type are also defined.

**Jung’s Psychological Type Theory**

Jung (1924) authored the book *Psychologic Types* because he felt that the information he presented was of wide significance and application. Jung, a Swiss psychiatrist, identifies 8 personality types and describes the characteristics of these types. He developed his theory after nearly 20 years of work in the domain of practical psychology. Jung concludes that one’s personality type is inherited. It is not merely a product that occurs within a person as a result of upbringing or environment. Jung (1924) categorizes two general personality types, based on attitude, as being extraverted and introverted. Attitude is the direction in which one’s psychic energy flows. Jung describes four basic functions which, when combined with the two general types, make a total of eight types. Thinking, feeling, sensation, and intuition are the four functions. Sensation and intuition are perceptive functions; thinking and feeling are judgment functions.

Extraversion means the person has an outward flow of energy toward objects. He focuses on the object. He thinks, feels, and acts in relation to the object. His outward focus is so strong that he continuously moves his subjective attitude, or personal interpretations, back to the object. In contrast, introversion is a turning inward of psychic energy. It’s not the object but the subject that is of greatest interest for the introvert. His subjective attitude takes precedence in his mind and the object takes second place; the object is not the focus of his attention. These two general attitudes are opposites. One of these attitudes is definitely dominant, meaning a person will exhibit characteristics of
extraversion or introversion, but not both. The opposite attitude may be within a person but characteristics of that inferior preference will not be displayed routinely by an individual (Jung, 1924).

Similarly, Jung states that a person develops and uses one of the four functions (sensation, intuition, thinking, or feeling) with which the individual is most comfortable. It is the person’s most gifted function by nature and it allows an individual the most social success. This characteristic of a person is what gives rise to the psychological types. If a person develops one function more completely through one’s development, one or more of the other functions will be much less developed. Jung describes these less developed functions as inferior functions. They are inferior in the normal person’s psychological type. However, they do not remain inferior in the person during times of psychological illness (Jung, 1924). Thinking and feeling are judgment functions which simply means they are concepts used to describe how a person makes decisions. Thinking and feeling are opposite concepts relating to the judgment function. Feeling types use subjective criteria to decide whether to accept or reject something. In contrast, thinking types use objective data during the decision making process. Jung (1924) labels thinking and feeling as rational functions because they are concepts that conform to the laws of reason.

Sensation and intuition are the final two basic psychological functions. Sensation and intuition are opposite concepts dealing with perception. Sensation, or sensing, is the process by which a person perceives something. Sensing is accomplished through use of the five bodily senses. It is strictly a perceptive function, not to be confused with feeling which is a judgment process. Intuition is a perceptive process which transmits perceptions
in an unconscious way. The person knows something will work in a given situation but can’t explain how he came to that conclusion. Jung (1924) labels intuition and sensation as irrational perceptive functions because they are not subject to the laws of reason. Jung’s belief that intuition and sensation are irrational perceptive functions does not mean that the concepts of sensation and intuition denote something contrary to reason; it simply means that their essence is not established by reason.

Myers-Briggs Type Indicator Operationalizing Jung’s Theory

Katharine Briggs and Isabel Myers had been interested in Jung’s theory of personality types for approximately 16 years prior to the outbreak of World War II. They believed that knowledge of one’s personal preferences through the terms of Jungian type theory would help women choose the kind of job with which they would be most comfortable and effective. This was a time when many men went off to war, and women were needed to work in factories to replace the men. Since Briggs and Myers were unable to find a tool that would identify Jungian types, they decided to create one. This tool was to become the Myers-Briggs Type Indicator (MBTI).

In 1943, when the first set of questions that were destined to become the MBTI were developed, the academic community strongly opposed Myers and Briggs because they were not psychologists nor did they have a degree or any formal training in psychology. However, in addition to educating herself on Jung’s theory, Isabel Myers had apprenticed herself for the preceding year with a qualified expert in the techniques and tools she needed and learned about test construction and validity. Undismayed by lack of acceptance in the psychological community, Isabel Myers continued developing the
indicator and applied the necessary tests for validity and reliability. She devoted the second half of her life to interpreting and adapting Jung’s theory of psychological type to help normal, healthy people better understand themselves and others (Myers & Myers, 1980/1995).

The goal of the MBTI is to identify from self-report the different preferences of people in regard to perception and judgment. Furthermore, the effects of each preference can be established by research and put to practical use (Myers & McCaulley, 1985). DeVito (1985) estimates, “The MBTI is probably the most widely used instrument for non-psychiatric populations in the areas of clinical, counseling, and personality testing.” (p. 1030) In 1994, over two and one half million people took the MBTI. It is the most widely used personality measure in history. It is used in career counseling, education and training, organizational development and team building. In communications, this tool and type theory are used to help people learn approaches that are most likely to be acceptable to each of the types and to create an environment where differences are seen as interesting and valuable rather than problematic (Myers & Myers, 1980/1995).

Additionally, the literature review indicates that the MBTI is useful and effective in the clinical setting (Carlson, 1989; Carskadon, 1979; Jones & Sherman, 1979; McCaulley, 1990; Provost, 1993; Sherman, 1981). However, although the MBTI was first introduced in 1962, there are a limited number of published research studies validating its usefulness within clinical areas of practice. Some of the most encouraging research is that done by counselors who have utilized the tool with their clients over several years of practice (Carskadon, 1979; Jones & Sherman, 1979).
The MBTI contains four separate scales. Each scale reflects one of four basic preferences which direct the use of perception and judgment. Myers and McCaulley (1985) emphasize the importance of the two concepts, perception and judgment, in understanding Jung’s theory. Perception is the many ways of becoming aware of things, people, or ideas. It includes information gathering, seeking of information through sensing or intuition, and selecting the stimulus to be attended. Judgment includes all the ways of making a decision about something that has been perceived. It includes evaluation and decision making, making the choice between the possible responses after perceiving the stimulus. The indicator is designed to force an individual to select a preference on each scale, consistent with Jung’s theory which postulates dichotomies.

The first three scales of the MBTI: extraversion-introversion, sensing-intuiting, and thinking-feeling are designed to identify the dichotomies as explicitly explained by Jung. Extraversion and introversion are attitudes explaining how people focus their perception and judgment. Extroverts are oriented primarily toward the outer world of people and things. Introverts are oriented primarily toward the inner world of concepts and ideas. The sensing-intuiting scale is designed to identify a person’s preference between the two opposite ways of perceiving; sensing through one or more of the five senses or intuition which reports meanings or possibilities that are worked out beyond the reach of the conscious mind. The thinking-feeling scale reflects a person’s preference between Jung’s judgment functions. A person with a preference for thinking makes impersonal decisions based on logical consequences. Someone with a preference for feeling makes decisions based on personal or social values (Myers & McCaulley, 1985).
The fourth scale of the MBTI, judgment-perception, is designed to describe the process a person uses primarily in dealing with the outer world. Jung (1924) does not explicitly describe judgment-perception as another unique dichotomy in his theory of psychological types. Judgment and perception are discussed by Jung within his descriptions of the four functions. He describes sensing and intuition as perceptive functions and thinking and feeling as judgment functions. Jung further describes thinking, feeling, sensing, and intuitive types, each having one particular function as one's dominant preference. However, the judgment-perception attitude was identified through close observations of behavior over a period of several years by Briggs and Myers prior to the development of the MBTI. Myers and McCaulley (1985) conclude that Briggs and Myers development of the judgment-perception attitude was a major contribution to the theory of psychological types.

There are several tools available to identify personality types. In this study, the MBTI was chosen due to its past documentation as a reliable and valid tool for identifying personality type. It is widely used and can be cross referenced by converting preference scores to continuous scores if the need arises for comparison studies. The MBTI can be easily scored via computer or hand scoring. People trained to administer and interpret psychological tests are permitted to purchase and utilize the MBTI.

Myers and Brigg's Extensions to Jung's Theory

Through the judgment-perception scale, the MBTI identifies which preference is dominant, a perceiving one or a judging one. If a person prefers judgment, he has a preference for using thinking or feeling when dealing with the outer world. On the other
hand, a person who prefers perception has a preference for using sensing or intuition for dealing with the outer world. Type theory, as interpreted by Myers and Briggs, includes the concepts of judgment and perception as major concepts. In developing the MBTI, Myers and Briggs expand Jung's theory to include judgment and perception as major concepts by making explicit one aspect of the theory that was implicit in Jung's work (Myers & McCaulley, 1985).

The MBTI states that one pole of each of the 4 scales is preferred over the other pole of that scale. The preference on each scale is independent of the preferences on each of the other 3 scales. The 4 scales together yield 16 possible personality types (Myers & McCaulley, 1985). Myers and Myers (1980/1995) explain how the MBTI expands Jung's theory. Jung (1924) combines the 4 functions with 2 attitudes to describe 8 types. Jung does not explicitly identify the 4 dichotomies combined to create as many type possibilities as are identified through the MBTI.

The MBTI explicitly explains which attitude is preferred, which function is the dominant process, and which style a person uses when dealing with the outside world. The MBTI uses single letters to describe each preference. When identifying the preferred attitude, extraversion or introversion, the capital letters E or I are used. For the perceiving functions, sensing and intuition, the capital letters S or N are used. N is used for intuition because capital I has already been assigned to denote the introverted attitude. For the judging functions of thinking and feeling, use the capital letters T and F. Lastly, for the judgment-perception scale, the capital letters J and P are utilized. The JP scale identifies which style a person uses when dealing with the outside world; it is an attitude
scale (Myers & McCaulley, 1985). A combination of the 4 letters is used to describe an individual’s personality type. Letters indicating an individual’s preference on each scale are combined to indicate one of the 16 possible personalities identified through the MBTI (see Table 1).

As described by Jung, each individual utilizes one of the four functions—sensing, intuiting, thinking, or feeling—as a dominant function. The other functions are inferior to the dominant. Myers and Briggs agree with Jung; however they describe an auxiliary

Table 1

Personality Types Identified Through the MBTI

<table>
<thead>
<tr>
<th>ISTJ</th>
<th>ISFJ</th>
<th>INFJ</th>
<th>INTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introverted</td>
<td>Introverted</td>
<td>Introverted</td>
<td>Introverted</td>
</tr>
<tr>
<td>Sensing</td>
<td>Sensing</td>
<td>Intuitive</td>
<td>Intuitive</td>
</tr>
<tr>
<td>Thinking</td>
<td>Feeling</td>
<td>Feeling</td>
<td>Thinking</td>
</tr>
<tr>
<td>Judging</td>
<td>Judging</td>
<td>Judging</td>
<td>Judging</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISTP</th>
<th>ISFP</th>
<th>INFP</th>
<th>INTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introverted</td>
<td>Introverted</td>
<td>Introverted</td>
<td>Introverted</td>
</tr>
<tr>
<td>Sensing</td>
<td>Sensing</td>
<td>Intuitive</td>
<td>Intuitive</td>
</tr>
<tr>
<td>Thinking Perceiving</td>
<td>Feeling</td>
<td>Feeling</td>
<td>Thinking Perceiving</td>
</tr>
<tr>
<td>Perceiving</td>
<td>Perceiving</td>
<td>Perceiving</td>
<td>Perceiving</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESTP</th>
<th>ESFP</th>
<th>ENFP</th>
<th>ENTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraverted</td>
<td>Extraverted</td>
<td>Extraverted</td>
<td>Extraverted</td>
</tr>
<tr>
<td>Sensing</td>
<td>Sensing</td>
<td>Intuitive</td>
<td>Intuitive</td>
</tr>
<tr>
<td>Thinking Perceiving</td>
<td>Feeling</td>
<td>Feeling</td>
<td>Thinking Perceiving</td>
</tr>
<tr>
<td>Perceiving</td>
<td>Perceiving</td>
<td>Perceiving</td>
<td>Perceiving</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESTJ</th>
<th>ESFJ</th>
<th>ENFJ</th>
<th>ENTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraverted</td>
<td>Extraverted</td>
<td>Extraverted</td>
<td>Extraverted</td>
</tr>
<tr>
<td>Sensing</td>
<td>Sensing</td>
<td>Intuitive</td>
<td>Intuitive</td>
</tr>
<tr>
<td>Thinking</td>
<td>Feeling</td>
<td>Feeling</td>
<td>Thinking</td>
</tr>
<tr>
<td>Judging</td>
<td>Judging</td>
<td>Judging</td>
<td>Judging</td>
</tr>
</tbody>
</table>
function instead of listing the three remaining functions as inferior to the dominant. The JP scale along with the EI scale enables one to identify which is the dominant and auxiliary function for each of the 16 types. The auxiliary function is the secondly preferred function. For example, if a person has a preference for thinking and that is his dominant function, he will have an auxiliary function which is either sensing or intuition. If a person has a preference for intuition which is his dominant function, he will have an auxiliary function of either thinking or feeling. If the dominant function is a perceptive function, sensing or intuition, the auxiliary function will be a judgment function--either thinking or feeling. Likewise, if the dominant function is a judgment function, the auxiliary function will be a sensing function (Myers & McCaulley, 1985).

Summary of Myers and Briggs’ Extensions to Jung’s Theory

Myers and Myers (1980/1995) explain Briggs and Myers’ extensions of Jung’s theory. These include the constant presence of the auxiliary process, results of the combination of perception and judgment, and role of the auxiliary. Jung discusses the auxiliary process. However, his theory of psychological types does not state that it is essential for balance of the dominant process as Briggs and Myers indicate. Secondly, the results of the combinations of perception and judgment are only briefly mentioned by Jung. Briggs and Myers discuss at length the perception and judgment functions including which is dominant and auxiliary. Lastly, Briggs and Myers discuss the role of the auxiliary in balancing introversion and extraversion. The auxiliary provides the needed extraversion for the introverts and the needed introversion for the extraverts. The introvert’s auxiliary gives them a means to adapt to the outer world and deal with it effectively. The
extraverts’ auxiliary gives them a means to relate to the world of ideas within their own inner life. Jung did allude to this role of the auxiliary but very briefly.

Relevant Research

Although research regarding personality type of registered nurses is scarce, articles regarding personality characteristics of nurses are more common. For example, Miller (1995) discussed the characteristics of intuitive nurses. Allen (1995) suggested the importance of personality preferences being equally represented in order to facilitate a happy and effective environment for patient care. Nieszczezewski (1996) discussed effects of personality types on management teams.

Furthermore, personality type is a subject of interest to many people. Over 100,000 copies of Gifts Differing, a book discussing understanding personality types, have been sold (Myers & Myers, 1980/1995). Personality type articles frequently appear in popular magazines (Christiano, 1996; Farley, 1989; Hales, 1989; Kurcinka, 1995; Lanning, 1994; Marzollo, 1990; Miller, 1990; O’Reilly, 1994; Roberts, 1996; Rodgers, 1992; Sandroff, 1992).

Researchers suggest a relationship exists between certain personality characteristics and occupational choice. The relationship between personality type and occupational choice has long been an area of interest to psychologists (Levitt, Lubin, & Zuckerman, 1962). The literature review indicated that researchers have sought to describe personality characteristics among nurses for greater than 50 years. However, prior to the 1970s, there were inconsistencies in many of the nursing studies related to identifying personality types among nurses and nursing students, which was due, in part,
to several methodological differences. For example, different instruments were used which made it difficult to compare studies. Not only did the instrument need to be reliable and valid there also needed to be consistency in use of instruments to compare results between studies (Smith, 1965).

**Instruments Utilized in Measuring Personality Types of Nurses**

In 1957, Navran and Stauffacher reported using a new personality tool, the *Edwards Personal Preference Schedule* (EPPS), in assessing the personality structure of psychiatric nurses. They reported utilizing this tool because they felt it was superior to any other instrument of its kind. Following Navran and Stauffacher, several researchers (Bailey & Claus, 1969; George & Stevens, 1968; Lentz & Michaels, 1965; Levitt, Lubin, & Zuckerman, 1962; Reece, 1961; & Stein, 1969) utilized the EPPS in assessing the personality types of nurses and nursing students. The studies revealed a slight trend toward a high need for order, deference, and endurance among students and practicing nurses. However, overall, there were inconsistencies in findings among the studies. Adams and Klein (1970) suggested that some of the inconsistencies were related to maturational changes within individuals and across generations.

By the late 1960's, researchers began utilizing other tools in assessing personality types of nurses. In addition to the EPPS, Adams and Klein (1970) and Smith (1965) utilized the *16 Personality Factor Questionnaire* (16PF) in studies involving personality characteristics of nursing students. Utilizing the 16PF, Cooper, Lewis, and Moores (1976) reported that long serving, senior nurses personality profiles were substantially different from those obtained from student nurses in previous studies. Wittmeyer,
Camiscioni, and Purdy (1971) utilizing the 16PF and the MBTI concluded that the ability to predict attrition and academic performance among nursing students was enhanced by the inclusion of personality measures.

Koehne-Kaplan and Tilden (1976) utilized a Jungian Type Survey with 99 nursing students which revealed the majority of students in this study were extroverted, sensing, feeling types. Lukens (1965) utilized the Stern Activities Index in assessing personality characteristics of 238 graduate nursing students: 101 majoring in psychiatric nursing and 137 majoring in medical surgical nursing. The study revealed a difference in personality characteristics between the two groups. For example, psychiatric nursing students had higher needs for emotionality and reflectiveness compared to medical surgical nursing students needs for natural science knowledge and practicalness. The major conclusion of this study was that personality traits are important variables associated with speciality choice among nurses.

Bean and Holcombe (1993) utilized the Personal Style Inventory (PSI) in identifying personality types of oncology nurses. The PSI was adapted from the MBTI and utilizes Jungian theory (Atkins & Piazza, 1987). However, the results of 3 studies (Atkins & Piazza, 1987; Bean, Grant, & Mueller, 1995; Bean & Holcombe, 1993) utilizing the PSI revealed that when there is a balance of scores in one of the dimensions, meaning the dichotomies of EI, SN, TF, or JP, those scores were eliminated from further computations. The result was smaller numbers in the final computations. Bean and Holcombe (1993) reported ISFJ as the most frequently occurring type among a sample of 40 oncology nurses, which was 6 out of 19 that remained after elimination of balanced
scores. Atkins and Piazza (1987) reported ISFJ as the most frequently occurring type among a sample of 46 emergency nurses, which represented 10 out of 31 nurses that remained after eliminating those with balanced scores. In studying personality types of 57 adult nurse practitioners, Bean, Grant, and Mueller (1995) reported that the PSI revealed ISTJ as the most frequently occurring type among this group. They note that after elimination of balanced scores, there were 6 out of 21 subjects that selected ISTJ.

**MBTI Data Bank Statistics**

Statistics from the MBTI data bank, collected from the 1970s to 1984, revealed that nurses showed a preference for sensing, feeling, and judgment (Myers & McCaulley, 1985). The MBTI data bank is a computer data bank of MBTI records generated from the MBTI scoring program at the Center for Applications of Psychological Type, Inc. in Gainesville, Florida. The two largest nursing samples, in the MBTI data bank reported in Myers and McCaulley (1985), involved 3,103 nurses (training not specified) and 1,880 registered nurses (no specialty areas designated). The samples revealed preferences for introversion, sensing, feeling, and judging. Statistics on 83 public health nurses also revealed preferences for introversion, sensing, feeling, and judging. Results of three other data bank samples involving 146 nurse consultants, 305 nurse educators, and 94 nursing administrators revealed slight differences in the personality preferences. All 3 groups preferred judging, which was consistent among all the reported occupational groups of nurses. The nurse consultants preferred extroversion, sensing, and feeling. The nurse educators preferred introversion, intuition, and feeling. And, the nurse administrators preferred introversion, sensing, and thinking.
Researchers Utilizing the MBTI

During the 1970s, more researchers utilized the MBTI in assessing personality type of nurses. Bruhn, Floyd, and Bunce (1978) reported that the most frequently occurring type among a sample of 43 pediatric nurse practitioners was ESFJ, which was consistent upon entry into the program and 1 year post-graduation. The investigators noted the effect of the educational program on the students attitudes resulting in higher scores on the MBTI toward introversion, sensing, feeling and perception immediately post-graduation. However, 1 year post-graduation scores were closer to entry scores.

Bates (1987/1989) concluded from a study of 81 freshmen associate degree nursing students that the students personality preferences were for extraversion, sensing, feeling, and judging. Sharpe (1988/1989) reported, in a longitudinal study of 291 associate degree nursing students, that personality types of student nurses completing the program had significantly more intuitives and thinkers when compared to the base sample of nursing students. Ishida, Inouye, and Shimamoto (1994) reported MBTI personality preferences of 26 nursing students compared to 26 nursing faculty members. The groups were ethnically diverse, and results of the study revealed students preferred thinking judging contrasted to faculty who preferred intuitive thinking.

Jain and Lall (1996) reported that sensing, feeling, and judging were found to be the dominant personality preferences in 15 of 34 nurses. Demographics of the study revealed a population of 34 nurses ranging from licensed practical nurses to master’s prepared nurses. Amenta (1984) compared MBTI types of 36 hospice nurses with 35 nurses in more traditional roles. The sample of nurses working in traditional roles
included medical surgical staff nurses and nurses employed in general care of a visiting nurse association. Hospice nurses and nurses working in traditional settings had preferences for introversion and feeling. However, nurses in traditional settings showed a significant preference for sensing compared to hospice nurses preference for intuition. Also, the nurses had a stronger judging preference, although not significant, than the hospice nurses who preferred perception.

O’Hara-Devereaux, Brown, Mentink, and Morgan (1978) reported extraversion, intuition, feeling, and judging were the most frequently occurring preferences among 63 family nurse practitioners. ENFP followed by ISFJ were the most frequently occurring types in the study. However, all types except INTP were represented in the study. Freund (1989) discussed chief executive officers (CEOs) and chief nursing officers (CNOs) types as being similar. The study of 52 CNOs and 46 CEOs revealed 4 common types among the 2 groups as being ENTJ, INTJ, ESTJ, and ISTJ. These were logical decision makers who liked planning and organization.

Researchers utilizing the MBTI compared staff nurses to nurses in management. Muchnick (1984/1985) described a sample of 18 nurses in management positions as having preferences for introversion, sensing, thinking, and judging. Muchnick reported a significant difference was found between the study sample and a normative sample of 414 registered nurses on the thinking-feeling scale of the MBTI. Van Ham (1994/1995) reported results of MBTI continuous scores in a study comparing hospital nurse managers (N=52) with hospital staff nurses (N=52). A multivariate analysis of variance (MANOVA) using the continuous scores from the MBTI revealed a significant difference
between the nurse managers and the staff nurses on the thinking-feeling scale of the indicator. The nurse managers preferred thinking (p<.001) significantly more frequently than did the staff nurses. Both groups preferred sensing and judging versus intuition and perception. DeVet (1985/1986) compared nurse managers to staff nurses within 5 acute care hospitals located in the state of Michigan. The sample consisted of 343 nurses: 36 middle nurse managers, 97 first-line managers, and 210 staff nurses. The majority of staff nurses had preferences for sensing, feeling, and judging compared to the managers preferences for intuition and thinking.

Reilly (1989/1990) reported a larger number of nurses in the operating room and critical care preferred thinking versus feeling. The sample for this study included 100 RNs, with 96 returning completed MBTIs, equally divided among 4 speciality areas: operating room, critical care, psychosocial nursing, and oncology. Coleman (1986/1987) administered the MBTI to a group of 86 registered nurses working in Neonatal Intensive Care (N=43) and Non-Intensive Care Pediatric Areas (N=43) and reported that sensing, feeling, and judging were the preferences of both groups. Lewis, Bonner, Campbell, Cooper, and Willard (1994) utilized the MBTI in a nursing research study and reported that nephrology nurses in New Mexico had individual preferences for intuition and thinking. Of 49 dialysis nurses, representing 42% of all the dialysis nurses in the state of New Mexico, 51% preferred intuition to sensing and 55% preferred thinking to feeling.

There were some inconsistencies in the preferences of registered nurses in various studies (see Table 2). Studies involving managers, administrators, and educators (Freund, 1989; Ishida, Inouye, & Shimamoto, 1994; Muchnick, 1984/1985; Van Ham, 1994/1995)
Table 2

Summary of Preferences Identified in the Literature Review

<table>
<thead>
<tr>
<th>SPECIALITY AREA</th>
<th>RESEARCHER</th>
<th>E</th>
<th>I</th>
<th>S</th>
<th>N</th>
<th>T</th>
<th>F</th>
<th>J</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADMINISTRATORS AND MANAGERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration (N=52)</td>
<td>Freund (1989)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration (N=305)</td>
<td>Myers &amp; McCaulley (1985) MBTI data bank</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Nurse Managers (N=52)</td>
<td>Van Ham (1994/1995)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDUCATORS AND STUDENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators (N=305)</td>
<td>Myers &amp; McCaulley (1985) MBTI data bank</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators (N=26)</td>
<td>Ishida et al (1994)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing Students (N=26)</td>
<td>Ishida et al (1994)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRACTICING NURSES IN VARIOUS SPECIALITY AREAS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 continues
Table 2 continued

Summary of Preferences Identified in the Literature Review

<table>
<thead>
<tr>
<th>SPECIALITY AREA</th>
<th>RESEARCHER</th>
<th>E</th>
<th>I</th>
<th>S</th>
<th>N</th>
<th>T</th>
<th>F</th>
<th>J</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Intensive Care Pediatric Nurses (N=43)</td>
<td>Coleman (1986/1987)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Nurse Practitioners (N=63)</td>
<td>O'Hara et al (1978)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric Nurse Practitioners (N=43)</td>
<td>Bruhn et al (1978)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Nurse Practitioners (N=57 decreased to 21)</td>
<td>Bean et al (1995)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dialysis (N=49)</td>
<td>Lewis et al (1994)</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Health Nurses (N=83)</td>
<td>Myers &amp; McCaulley (1985) MBTI data bank</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Consultants (N=146)</td>
<td>Myers &amp; McCaulley (1985) MBTI data bank</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses (N=3,103)</td>
<td>Myers &amp; McCaulley (1985) MBTI data bank</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs (N=1,880)</td>
<td>Myers &amp; McCaulley (1985) MBTI data bank</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Staff Nurses (N=52)</td>
<td>Van Ham (1994/1995)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Staff Nurses (N=210)</td>
<td>DeVet (1985/1986)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oncology (N=40 decreased to 19)</td>
<td>Bean &amp; Holcombe (1993)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency (N=46 decreased to 31)</td>
<td>Atkins &amp; Piazza (1987)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
showed nurses with preferences toward intuition and/or thinking which validated samples represented in the MBTI data bank. Several studies showed nurses with preferences toward intuition and/or thinking which contrasted with earlier samples of nurses (Amenta, 1984; Bean, Grant, & Mueller, 1995; Lewis, Bonner, Campbell, Cooper, & Willard, 1994; O’Hara-Devereaux, Brown, Mentink, & Morgan, 1978; Reilly, 1989/1990). However, most of these studies involved specialty areas of practice that had not been researched previously. With additional research, it may be identified whether or not these differences were related to specialty choice or if they were related to nursing in general.

The sample of 3,103 nurses in the MBTI data bank could include licensed practical nurses (LPNs) and possibly even other occupations related to nursing, both of which could affect the results of the type that represented nurses especially those that go on to pursue higher degrees of education. A sample of 260 LPNs in the data bank revealed strong preferences for sensing and feeling; 73.85% of the LPNs preferred sensing and 68.08% preferred feeling. LPNs represented the largest percentage with sensing preferences of the samples classified as nursing occupations. LPNs represented the second highest of the nursing occupations preferring feeling. A sample of 83 public health nurses represented the group of nurses with the highest percentage (69.88%) preferring the feeling function (Myers & McCaulley, 1985). Considering that LPNs had strong preferences for sensing and feeling, grouping LPNs and RNs together could skew the results of the preferences among the various groups of nurses.

In summary, the literature review revealed that much of the published research in the 1950s and 1960s, regarding personality types of nurses, related to personality types of
nursing students and many times these were freshman students first entering the program. Furthermore, studies showed that preferences for those successfully completing nursing programs were not the same as those entering programs (Bates, 1987/1989; Healy & Borg, 1951; Sharpe, 1988/1989). The literature review emphasized the need for further research regarding personality types of senior nurses. Additionally, studies revealed that there were probably differences among nurses in the various speciality areas of nursing. No studies were found regarding personality types of rural nurses. Further studies need to be done to confirm these findings which may, subsequently, prevent misleading advice being given during career counseling. The purpose of this study was to identify the personality types of nurses choosing to practice nursing in a rural community hospital. What are the most common personality types of registered nurses employed in a rural hospital, as identified by the MBTI? The results will add to the body of knowledge regarding personality preferences of nurses, greatly needed in career counseling and for future research.
CHAPTER III
METHODS

The purpose of this study was to identify the personality types of registered nurses practicing in an acute care rural community hospital. The study was descriptive in nature. This chapter includes a discussion of the research design of the study under the following headings: research design, setting, sample, procedure, instrument, data analysis, ethical considerations, methodological limitations, and communication of findings.

Research Design

A typical descriptive design was used. Personality preferences of registered nurses working in a rural hospital in western Kentucky were identified via the Myers-Briggs Type Indicator (MBTI). Frequencies and percentages of the most frequently occurring preferences and types are discussed in Chapter IV.

Setting

The hospital administrator and the director of nursing of a 68 bed acute care rural hospital expressed a desire for their staff to participate in the MBTI workshops and supported the staff’s attendance with paid time to attend. After approval of the thesis proposal was granted by the Thesis Committee and the Western Kentucky University Institutional Review Board (IRB) for human subjects of research (see Appendix A), a
letter was sent to the hospital administrator requesting permission to ask all registered nurses to participate in a research project for a thesis conducted through Western Kentucky University. After approval was granted by the hospital ethics committee (see Appendix B), the investigator was notified that data collection could begin through the nursing department of the hospital.

Sample

A convenience sample of 40 registered nurses employed at a 68 bed acute care hospital in a rural community in Kentucky was utilized in the study. All registered nurses employed at the hospital were asked to participate. The sample included registered nurses that were involved in direct patient care. Some of them were supervisors having various leadership responsibilities. However, they had an equal amount of time involved with patient care. The upper management nurses involved in administrative duties with very little, if any, patient care were not included in the study. Licensed practical nurses (LPNs) and nursing assistants were not included in the study.

Sample size was determined by use of power analysis. The level of power for the study was .80 and the level of significance was .05. If the sample size was 36, the effect size would be .40, which would be a medium effect size. There was no problem in obtaining this number of participants from the facility. The total number of registered nurses employed in staff positions at the hospital was 58; 40 of them participated.

Procedure

The nurses were informed of the study by the researcher at an inservice meeting. This meeting ran approximately one hour and was scheduled for the purpose of informing
the staff of the research study and allowing them time to complete the MBTI and
demographic questionnaires, if they chose to participate. The dates of those meetings
were approved through nursing administration. Each nurse received a copy of the consent
form, was given time to read the form, and have questions answered. After signing the
consent form, those wishing to participate in the study were given the Myers-Briggs Type
Indicator, Form G Booklet and Profile Report Form. They were also given a demographic
sheet to complete. They completed the demographic sheet and MBTI at that time or took
them to complete at a later date. Total amount of time needed to complete the MBTI and
the demographic sheet was approximately 30 to 45 minutes. If they chose to complete the
forms at a later date, they placed them in a sealed envelope and left them in nursing
administration for the researcher to retrieve.

Anonymity and confidentiality was assured. Code numbers were placed on the
MBTI answer sheets prior to distribution. The nurses were asked to write down the code
number. If they desired to receive individual results from the MBTI, those could be
claimed via the code number at a workshop entitled personality type feedback session.
These feedback sessions were provided by the researcher as a courtesy and thank-you for
their participation in the research project. The nurses were informed that they must
present the code number to the researcher at the feedback session if they wished to receive
their individual results from the MBTI.

Matching code numbers were placed on the demographic sheets that were
distributed with the MBTI answer sheets. Speciality areas and other demographic data
were obtained from the demographic sheets (see Appendix C), thus allowing comparisons
of personality preferences to some specialty choices in the analysis of data. The results were grouped together to describe the frequently identified preferences of registered nurses. Medical surgical nurses formed one group. The other groups were critical care unit, operating room, emergency room, hospice, nursery, and labor and delivery. Units employing less than 5 people were grouped together, thereby protecting anonymity. The total number of medical surgical nurses employed at the hospital was 22. Nurses from the other specialty areas totaled 36: 9 emergency nurses, 8 critical care nurses, 8 operating room nurses, 4 labor and delivery nurses, 4 nursery nurses, and 3 hospice nurses. The investigator scored each person’s MBTI and recorded results on an individual report form by the code number.

The researcher was present at the initial inservice meetings at various times to accommodate all shifts of nurses. Also, there were feedback sessions at various times to accommodate all shifts. The feedback sessions were two hours in length. Ten to twenty people could attend a feedback session. At the time the questionnaires were completed, the staff were given the opportunity to sign-up for feedback sessions which were held within the following weeks. At the feedback session, the nurses received information on all the personality preferences as discussed by Myers and Briggs. They were led through a self-selection process. Following self-selection of their preferences, they were given their individual MBTI results on a report form. They claimed these results by the code number from the answer sheet.
Instrument

The Myers-Briggs Type Indicator was the instrument utilized to measure personality types of the nurses (see Appendix D). The MBTI tests Jung's theory of psychological types and puts it to practical use. The MBTI is concerned with individual differences in basic functions and attitudes. These differences are a familiar part of everyday life. Myers and Myers (1980/1995) express that these differences among individuals are their unique gifts. They state that all personalities are equally valuable.

The MBTI is published in 3 forms: Form F, Form G, and Form AV (Myers & McCaulley, 1985). Form AV is an abbreviated form and is not recommended for use in research studies. Form F and Form G are essentially the same except that on Form G the items that are most predictive for total type are at the beginning, thus increasing the likelihood that persons who do not finish the MBTI will receive accurate reports of their type. Form G is now the standard version of the MBTI. Form F is recommended only when researchers are willing to share their answer sheets with the publishers on a confidential basis for further research. Form F has 166 items, whereas Form G has 126 items. Both contain research items as well as the items scored for type. However, as mentioned earlier, Form G is arranged so that the most predictive items scored for type are at the beginning.

Reliability

The MBTI was utilized as the instrument for this study due to its past documentation as a reliable and valid tool for identifying personality type. Carlyn (1977) concluded from a comprehensive assessment of the MBTI that the indicator was an
adequately reliable and valid instrument measuring dimensions of personality quite similar to those postulated by Carl Jung. Measures of internal consistency and measures of stability, two aspects of reliability, will be examined below.

Internal consistency studies have usually produced acceptable reliabilities for both continuous and dichotomous scores (Myers & McCaulley, 1985; Stricker & Ross, 1963). Measurements of internal consistency (coefficient alpha) for each subscale on Form F, N=9,216 adults (288 of each type from the MBTI data bank) range from .76 to .83 (Myers & McCaulley, 1985, p. 169). Myers and McCaulley (1985) reported that internal consistency derived from product-moment correlations of split-half scores with Spearman-Brown prophecy formula correction ranged from .82 to .86 on a sample of 32,671 males and females taking Form G of the MBTI (data from the MBTI data bank). The product-moment correlations ranged from .84 to .87 on a sample of 55,971 males and females taking Form F of the MBTI. Stricker and Ross (1963) reported alpha coefficient for each MBTI subscale, Form F (N= 397 males) ranging from .64 to .78. They reported alpha coefficient, for each subscale of the MBTI Form F, ranged from .70 to .83 for a group of 400 high school females.

Stability of type category scores has been shown through test-retest data. Test-retest reliabilities of the MBTI showed consistency over time. Reports of test-retest reliability coefficients for 117 undergraduate students (5 week interval) ranged from .78 to .87 for the four subscales of the MBTI, Form F (Howes, 1977). Reports of test-retest reliability coefficients for 121 student nurses (2.5 years interval) ranged from .60 to .75 for the four subscales for the MBTI, Form F (Weiss, 1980, cited in Myers & McCaulley,
1985, p. 172). Carskadon (1977) reported test-retest correlation coefficients using the Pearson r formula for 64 male and 70 female college students (8 week interval) ranged from .73 to .87 on all scales with the exception for males on the thinking feeling scale (r = .56). Carskadon (1982) reported test-retest product-moment correlations, on Form G of the MBTI, for 24 males (5 week interval) ranged from .77 to .93; for 36 females (5 week interval) ranged from .56 to .89. Myers and McCaulley (1985) stated that when subjects reported a change in type, it usually occurred in only one preference and in scales where the original preference was low.

**Validity**

The validity of the MBTI is dependent on how well it measures the theoretical constructs of Jung’s psychological types which is what it was intended to measure. Two types of validity are discussed, construct validity and content validity. Construct validity has been suggested by the identification of relationships between the scales for the MBTI and measurements of personality traits and occupational groupings that would be predicted by the theory on which the MBTI was constructed. For example, in the 1950s Myers conducted a longitudinal study involving 5,355 medical students from 45 schools. Twelve years later, a follow-up study identifying their specialty choices revealed that the students had significantly chosen specialties which in theory would attract their types (Myers & McCaulley, 1985). Laney (1949) showed that turnover of employees placed in unsuitable jobs was significantly higher than the turnover rate for employees in positions that suited their personality preferences. Type distributions of certain occupational groups revealed that certain types are more attracted to certain occupations. Many of these as
reported in Myers and McCaulley (1985) showed that the majority of persons entering that occupation were the MBTI type as predicted by theory which contributed to the construct validity of the MBTI.

Myers and McCaulley (1985) concluded that the MBTI and the Jungian Type Survey (Gray-Wheelwright) appeared to measure the same constructs. This was of special interest to the construct validity of the MBTI because the Jungian Type Survey was developed by two Jungian analysts independently of the MBTI. Stricker and Ross (1964) concluded, in a study comparing MBTI scales with the Gray-Wheelwright Psychological Type Questionnaire scales, that all the product-moment correlations between the scores for the corresponding scales on the two instruments were statistically significant (p <.01).

Cohen, Cohen, and Cross (1981) reported that the extraverted-introverted (EI), sensing-intuiting (SN), and thinking-feeling (TF) scales of the MBTI for a group of participants compared with their spouses behavioral styles inventory of them showed significant Kappa coefficients. The judgment-perception (JP) scale failed to show significant agreement. Cohen, Cohen, and Cross concluded that the study yielded construct validity for three scales of the MBTI. The JP scale was perhaps more difficult to assess on the basis of observed behaviors even for spouses. This study concluded that the constructs measured by the MBTI were recognizable by persons close to one another such as married couples. Additionally, Cohen, Cohen, and Cross report that the participants were asked to complete a form with a report of ideal ratings of themselves. These ideal ratings when compared with individual MBTI responses revealed a negative correlation indicating divergent validity.
Myers and McCaulley’s (1985) extensive account of the construction of the MBTI included the criteria used for choosing and scoring items and provided considerable evidence for the indicator’s content validity. Bradway (1964), in a study involving 28 Jungian analysts, obtained evidence for content validity of the MBTI by comparing the analysts own self-type to their MBTI type. Carlyn (1977) concluded that from an inspection of the scored items in the extraversion introversion, sensing intuition, and thinking feeling scales, they were generally consistent with Jung’s psychological type theory. Additional evidence for content validity has been obtained by correlating individual’s MBTI scores with their Gray Wheelwright scores (Bradway, 1964; Stricker & Ross, 1964).

Administration and Scoring of the MBTI

In order to administer the MBTI, one must complete a graduate course in tests and measurements or complete a qualifying program approved by Consulting Psychologists Press (CPP) for purchase of the MBTI. The investigator is certified through Type Resources, a CPP approved qualifying program, to purchase and administer the MBTI. Scoring of the MBTI can be done via computer or hand scored. Scoring for this study was done manually by the investigator. Five stencils are provided for hand scoring the MBTI Form G. It takes approximately 10 to 15 minutes to score each indicator. Each pole of each scale has points which are the weighted total of answers for that pole. The points are converted into preference scores. The preference score consists of a letter, for example E or I for the extraversion introversion scale, showing the direction of the preference and a number which shows the strength of that particular preference. The
results were recorded on an individual report form to be distributed to participants at the feedback sessions.

**Demographic Questionnaire**

Demographic information was obtained from a demographic questionnaire (see Appendix C) which was completed along with the MBTI. Demographic information included nursing specialty, years experience, employment status, educational level, sex, race, marital status, and age.

**Data Analysis**

After hand scoring of the indicators was completed, data were analyzed using frequencies and percentages of the various preferences among the nurses and various specialty areas. The most common personality types among the nurses were reported utilizing frequencies and percentages. Also, demographic data were analyzed utilizing frequencies and percentages. The sample was compared to a sample of RN's from the MBTI data bank utilizing the *Selection Ratio Type Table* (SRTT). The SRTT is a statistical tool that has been utilized by researchers analyzing data from the MBTI for many years. The SRTT compares one type table with another type table. The Table displayed on the SRTT is the sample. The type table to which it is compared is called the base population (McCaulley, 1985).

**Ethical Considerations**

Confidentiality and anonymity have been discussed. Also, the consent process has been discussed. Prior to implementation of this study, the proposal was reviewed by the Thesis Committee, Western Kentucky University IRB for human subjects of research, and
the hospital's Ethics Committee. Letters of approval are included in Appendixes A and B. Risks and benefits of the study are discussed in the consent form (see Appendix E). The completed questionnaires and consent forms were stored in a locked cabinet at the office of the secretary in the nursing department at Western Kentucky University. They will be kept for 3 years as required by the IRB for human subjects of research committee. At the end of 3 years, the questionnaires and consent forms will be destroyed.

Methodological Limitations

The major methodological limitation of this study was utilizing a convenience sample from one hospital. However, all registered nurses had equal opportunity to participate. The demographic data were carefully analyzed for biases. No known biases were identified by the investigator. A thorough description of the sample was included in the analysis of demographic information. That information will allow other researchers to evaluate for possible biases and will allow the sample to be compared to other samples with similar descriptions. In addition, the study sample is compared to a large base population taken from the MBTI data bank. However, when drawing conclusions one must remember that there are limited studies and most have not been validated. Additionally, the small sample sizes limit the conclusions that can be made. Even large samples often times result in small samples among the 16 personality types once they are broken apart for analysis.

Communication of Findings

Findings from the research will be shared with the participating hospital in aggregate form as they are communicated in the thesis. Also, findings will be shared with
the Center for Applications of Psychological Type in Gainesville, Florida, and a paper will be submitted to a professional journal for publication. The researcher, having an interest in psychological type theory, will present her research findings at professional meetings as well as in conversations with peers.
A sample of 40 registered nurses was used to determine the personality characteristics of nurses employed in a rural hospital. The Myers-Briggs Type Indicator (MBTI), Form G, was used to measure personality types. This tool can be used to identify individuals according to 16 different personality types. The 4 scales found on the inventory are extraversion-introversion (EI), sensing-intuition (SN), thinking-feeling (TF), and judging-perceiving (JP). A detailed description of the sample is presented in this chapter. Results of the nurse's responses on the MBTI are presented, including the results from a comparison of the sample to a group of registered nurses from the MBTI data bank.

Description of Sample

The sample for the study was drawn from the registered nurses employed at a 68 bed acute care hospital in a rural community in western Kentucky. Of the 58 registered nurses employed in staff positions at the hospital, 40 (69%) chose to participate in the study. Each nurse completed the MBTI and a demographic questionnaire. Demographic data (i.e., gender, age, race, marital status, educational preparation, years in nursing, and years in current specialty) were collected to determine the characteristics of the sample.
The sample consisted of 35 female nurses and 5 male nurses. The age of the participants in the study ranged from 23 to 62 years with a mean age of 42 years (see Table 3). The majority of the nurses (80%) were between the ages of 33-52 years. Although race was an optional demographic category, all participants completed it. The

Table 3

Distribution of Nurses by Age and Specialty Area

<table>
<thead>
<tr>
<th>Age</th>
<th>Med Surg</th>
<th>CCU</th>
<th>OR</th>
<th>ER</th>
<th>Other</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-27</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>28-32</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>33-37</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td>27.5</td>
</tr>
<tr>
<td>38-42</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>43-47</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>48-52</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>53-57</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>58-62</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Mean Age

| 43 | 45 | 35 | 40 | 46 | 42 |

Note. Med Surg = Medical Surgical; CCU = Critical Care Unit; OR = Operating Room; ER = Emergency Room.
sample consisted of 39 Caucasians and 1 Other. With regard to marital status, 35 were married, 1 single, 3 divorced, and 1 widowed. Specialty areas of practice were considered. The sample consisted of 10 (25%) medical surgical nurses, 5 (12.5%) critical care unit nurses, 6 (15%) operating room nurses, 9 (22.5%) emergency room nurses, and 10 (25%) nurses working in other specialties, including hospice, nursery, and labor and delivery. Other specialties were not listed separately due to the fact that each area employed less than five nurses. The number of years in nursing for the total group varied from less than 1 to greater than 15 (see Table 4). Distributions of nurses according to years in specialty area revealed that the nurses had been in their speciality areas greater than 5 years; they were experienced nurses. One third of the nurses had been practicing for 1-5 years, approximately one third had 6-15 years in nursing, and approximately one third had greater than 15 years in nursing. Two-thirds of the nurses had been practicing nursing for greater than 5 years. Furthermore, 62.5% of the nurses had greater than 5 years experience in one particular speciality area. Only 4 nurses (10%) of the sample had less than 2 years experience in a speciality area of nursing.

There were 38 nurses employed full-time and 2 nurses reported working part-time. Shifts worked included days, evenings, and nights: 29 (73%) nurses worked days, 7 (18%) worked evenings, and 4 worked nights. Educational preparation of the nurses was also noted (see Table 5). It was found that 31 of the nurses were associate degree graduates, 7 held bachelor degrees, and one held a masters degree. One nurse was a diploma graduate.
Table 4

Distribution of Nurses According to Years in Nursing and Years in Specialty

<table>
<thead>
<tr>
<th>Years in Nursing</th>
<th>Specialty Area</th>
<th>Med Surg</th>
<th>CCU</th>
<th>OR</th>
<th>ER</th>
<th>Other</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>1-5</td>
<td></td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td>11</td>
<td>27.5</td>
</tr>
<tr>
<td>6-10</td>
<td></td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>11-15</td>
<td></td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>&gt;15</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td>6</td>
<td>32.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years in Specialty</th>
<th>Specialty Area</th>
<th>Med Surg</th>
<th>CCU</th>
<th>OR</th>
<th>ER</th>
<th>Other</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1-2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2-3</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
<td>17.5</td>
</tr>
<tr>
<td>3-5</td>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>&gt;5</td>
<td></td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>25</td>
<td>62.5</td>
</tr>
</tbody>
</table>

Note. Med Surg = Medical Surgical; CCU = Critical Care Unit; OR = Operating Room; ER = Emergency Room.
Table 5

Distribution of Nurses According to Current Degree Held

<table>
<thead>
<tr>
<th>Degree</th>
<th>Med Surg</th>
<th>CCU</th>
<th>OR</th>
<th>ER</th>
<th>Other</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>1</td>
<td>1</td>
<td></td>
<td>4</td>
<td>9</td>
<td>31</td>
<td>77.5</td>
</tr>
<tr>
<td>AD</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>4</td>
<td>31</td>
<td>77.5</td>
</tr>
<tr>
<td>BSN</td>
<td>2</td>
<td>5</td>
<td></td>
<td>7</td>
<td>1</td>
<td>17.5</td>
<td></td>
</tr>
<tr>
<td>MSN</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

Note. Med Surg = Medical Surgical; CCU = Critical Care Unit; OR = Operating Room; ER = Emergency Room; AD = Associates Degree; BSN = Bachelor of Science in Nursing; MSN = Master of Science in Nursing.

Findings

This section includes results from the analysis of data under the following headings: preferences on the MBTI, research question 1, research question 2, research question 3, and comparison of the sample to a base population from the MBTI data bank.

Preferences on the MBTI

The frequency and percentage of nurses preferring each of the four bipolar preferences on the Myers-Briggs Type Indicator was examined (see Table 6). Overall, data indicated that extraversion was preferred over introversion by a very small margin. Twenty-one (52.5%) of the nurses preferred extraversion over introversion. Sensing was
Table 6

Distribution of Nurses According to Preferences for Dimensions on the MBTI

<table>
<thead>
<tr>
<th>Specialty Area</th>
<th>Med Surg</th>
<th>CCU</th>
<th>OR</th>
<th>ER</th>
<th>Other</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>21</td>
<td>52.5</td>
</tr>
<tr>
<td>Introversion</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>Sensing</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>29</td>
<td>72.5</td>
</tr>
<tr>
<td>Intuition</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>11</td>
<td>27.5</td>
</tr>
<tr>
<td>Thinking</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>Feeling</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>26</td>
<td>65</td>
</tr>
<tr>
<td>Judgment</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>24</td>
<td>60</td>
</tr>
<tr>
<td>Perception</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>16</td>
<td>40</td>
</tr>
</tbody>
</table>

Note. Med Surg = Medical Surgical; CCU = Critical Care Unit; OR = Operating Room; ER = Emergency Room.

preferred over intuition (72.5%), feeling preferred over thinking (65%), and judgment was preferred over perception (60%).

Research Question 1

The first research question was, “What are the most common personality types of registered nurses employed in a rural hospital, as identified by the MBTI?” A type table is the most convenient method for displaying data collected from the MBTI. In this sample, 13 of the 16 types were represented (see Table 7). Of the 40 nurses participating in the
### Table 7

**Distribution of Nurses According to MBTI Personality Types**

<table>
<thead>
<tr>
<th></th>
<th>ISTJ</th>
<th>ISFJ</th>
<th>INFJ</th>
<th>INTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>10</td>
<td>22.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>ISTP</td>
<td>ISFP</td>
<td>INFP</td>
<td>INTP</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>2.5</td>
<td>10</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>ESTP</td>
<td>ESFP</td>
<td>ENFP</td>
<td>ENTP</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>2.5</td>
<td>5</td>
<td>15</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>ESTJ</td>
<td>ESFJ</td>
<td>ENFJ</td>
<td>ENTJ</td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>%</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>7.5</td>
</tr>
</tbody>
</table>

**Note.** N=40.

In the study, the greatest number of nurses were classified as ISFJ (N=9). The second most frequently occurring personality type was ENFP (N=6). Regarding the personality types, Table 1 lists what each capital letter represents.

#### Research Question 2

The second research question was, “What is the most common personality type of medical surgical nurses in a rural hospital?” Of the 22 medical surgical nurses employed by the hospital, 10 (45%) chose to participate. Of those 10 nurses, the greatest number of
nurses were classified as ISFJ, which represented 3 (30%) of the participating medical surgical nurses. The second most frequently occurring personality types were ISTJ (N=2) and ENFP (N=2). Eight of the 10 nurses had a preference for sensing. Only two medical surgical nurses had a preference for intuition—those were the two ENFPs.

Research Question 3

The third and final research question asked, “What is the most common personality type of the other group of specialty areas in a rural hospital?” Participation among the other specialty areas was greater than the medical surgical area. There were 6 specialty areas within this hospital excluding the medical surgical unit. The critical care unit, operating room, and emergency room were listed separately due to the numbers of employees in those areas. Hospice, nursery, and labor and delivery were listed as other due to the fact that each area contained less than 5 registered nurses. This listing was done to ensure anonymity for those nurses working in the departments containing less than 5 employees. Of the 9 emergency room nurses employed by the hospital at the time of this study, all chose to participate. Of the 8 critical care nurses, 5 participated. Six of eight operating room nurses participated. And, of the 11 nurses making up the 3 remaining specialty areas, 9 participated. Of the 30 nurses comprising all the specialty areas except medical surgical, the greatest number of nurses were classified as ISFJ (N=6) followed by ESFJ and ENFP (see Table 8).

When examining the various specialty areas, consisting of a minimum of 5 registered nurses, participating in the study, the following personality types appeared: ESFJ (60%) was the most frequently reported type among the 5 critical care nurses.
Table 8

Personality Types of Nurses Comprising All Specialty Areas Except Medical Surgical

<table>
<thead>
<tr>
<th></th>
<th>ISTJ</th>
<th>ISFJ</th>
<th>INFJ</th>
<th>INTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=2</td>
<td>N=6</td>
<td>N=0</td>
<td>N=0</td>
<td>N=0</td>
</tr>
<tr>
<td>%='5</td>
<td>%='15</td>
<td>%='0</td>
<td>%='0</td>
<td>%='0</td>
</tr>
<tr>
<td>ISTP</td>
<td>ISFP</td>
<td>INFP</td>
<td>INTP</td>
<td></td>
</tr>
<tr>
<td>N=1</td>
<td>N=3</td>
<td>N=1</td>
<td>N=0</td>
<td></td>
</tr>
<tr>
<td>%='2.5</td>
<td>%='7.5</td>
<td>%='2.5</td>
<td>%='0</td>
<td></td>
</tr>
<tr>
<td>ESTP</td>
<td>ESFP</td>
<td>ENFP</td>
<td>ENTP</td>
<td></td>
</tr>
<tr>
<td>N=1</td>
<td>N=1</td>
<td>N=4</td>
<td>N=1</td>
<td></td>
</tr>
<tr>
<td>%='2.5</td>
<td>%='2.5</td>
<td>%='10</td>
<td>%='2.5</td>
<td></td>
</tr>
<tr>
<td>ESTJ</td>
<td>ESFJ</td>
<td>ENFJ</td>
<td>ENTJ</td>
<td></td>
</tr>
<tr>
<td>N=3</td>
<td>N=4</td>
<td>N=0</td>
<td>N=3</td>
<td></td>
</tr>
<tr>
<td>%='7.5</td>
<td>%='10</td>
<td>%='0</td>
<td>%='7.5</td>
<td></td>
</tr>
</tbody>
</table>

Note. N=30.

ESTJ (33%) and ENTJ (33%) were the most frequently occurring types representing 66% of the 6 operating room nurses. The emergency room nurses were scattered over the type table more than the other specialty areas. There were 2 (22%) each of the following types: ISTJ, ISFJ, and ENFP representing a total of 66% of the emergency room nurses. The 10 nurses working in the smallest departments of hospice, nursery, and labor and delivery were represented primarily by ISFJ personalities (40%). There were 2 (20%)
ENFPs. Therefore, 60% of the nurses working in the smallest departments (hospice, nursery, and labor and delivery) were either ISFJ or ENFP.

Comparison of the Sample to a Base Population from the MBTI Data Bank

A comparison was made utilizing the Center for Applications of Psychological Type's SRTT program. The sample of 40 nurses was compared to a base population of 1,880 nurses (no specialty stated) from the MBTI data bank. Comparison between this sample and the base population revealed that there was a significant difference in the number of sensing \[\chi^2(9, N=40)=3.8, p=.05\] and intuiting \[\chi^2(9, N=40)=3.8, p=.05\] personality types between the groups. There were more sensing types than were expected and less intuitive types than were expected. The function pairs were not analyzed because there were too many cells with less than 5, thereby violating the assumptions of the chi-square.

Conclusions

The analysis of data revealed that a sample of 40 registered nurses employed in a rural community hospital preferred the personality preferences of extraversion, sensing, feeling, and judging. The sample consisted of experienced nurses working in staff positions within the hospital. These findings support the theory that hospital staff nurses have preferences for sensing, feeling, and judging which are consistent with the expected tasks of the direct care giver.
CHAPTER V
DISCUSSION

In this chapter, the results of the study and possible explanations for the findings are examined in relation to the research questions, theory, and previous research. The interpretations of major findings, conclusions derived from the study, limitations of the study, implications for nursing, and recommendations for further research are discussed. The personality types of registered nurses employed in a rural hospital were determined by utilization of the Myers-Briggs Type Indicator (MBTI). For several years, the MBTI has been a useful tool in identifying what personality types enter certain professions. The MBTI operationalizes Jung’s psychological type theory.

The data collected and analyzed in this study provide descriptive information on the personality types of nurses who are employed in a rural community hospital. The setting was a 68 bed acute care hospital located in a rural county in western Kentucky. The sample consisted of 40 registered nurses employed in the various specialty areas within the hospital. All nurses were invited to participate in the research project via memorandums posted at time clocks. Data were collected during inservice meetings at the hospital. Forty nurses, 69% of the hospital’s nursing staff, volunteered to participate in the study. Data obtained from the MBTI and demographic questionnaires were analyzed to
determine frequency counts and percentages. A chi-square analysis of the sample compared to a MBTI data bank sample was done.

The nursing profession offers a wide range of specialty areas and settings. These various environments differ in their structure, autonomy, and tasks. For this reason, nursing is a profession with high levels of occupational stress. Although much has been written regarding the nursing profession, little has been written concerning the personality types of those who thrive in the many different nursing environments. In a review of the literature, no studies were found regarding the personality types of nurses in rural Kentucky.

Description of the Sample

Thus, this study is unique in several aspects. First, the study focused on one hospital in a rural area of Kentucky. Second, the sample was comprised of relatively homogenous characteristics in regard to race, sex, age, degree, and marital status. Also, the majority of the nurses (72.5%) participating in the study worked day shift, while 17.5% worked evenings and 10% worked nights. This breakdown of percentages indicates that a fair proportion of the staff from each shift participated in the study. The average number of years as a registered nurse was greater than 5 revealing a group of experienced senior nurses.

The literature review emphasized the need for studies involving experienced nurses. Regarding personality types of nurses, much of the published research in the 1950s and 1960s related to personality types of nursing students. Since the 1970s, there have been studies utilizing the MBTI in identifying personality types of nurses. However,
the limited number of studies available revealed that there were probably differences among nurses in the various speciality areas of nursing. Additional research needs to be done to clarify these differences.

Research Questions

Three research questions guided the study. The first question was what are the most common personality types of registered nurses employed in a rural hospital, as identified by the MBTI? Overall, nurses had preferences for extraversion, sensing, feeling, and judging. Twenty-one (52.5%) of the nurses, participating in the study, chose extraversion over introversion which was a minimal margin. However, 29 (72.5%) of the nurses chose sensing over intuition. Regarding the thinking feeling and judgment perception scales, 26 (65%) chose feeling over thinking and 24 (60%) chose judging over perceiving.

The findings of this study support the theory that people with preferences for sensing, feeling, and judging are attracted to hospital nursing. Myers and Myers (1980/1995) suggest that the tasks of hospital nursing, the direct care-giver, are associated with preferences of sensing, feeling, and judgment and that individuals with these preferences should be attracted to hospital nursing. People with a preference for sensing utilize their five senses for perceiving information. Sensing types like routines and dislike new problems unless there are standard ways to solve them. Individuals with a preference for feeling prefer feeling as a way of making decisions with personal warmth because their feelings provide them with the understanding of how their decision will affect themselves and others. They are more concerned with facts about people, and they
tend to be friendly and sociable. Statistics from the MBTI data bank, collected from the 1970s to 1984, revealed that nurses showed a preference for sensing, feeling, and judgment which supported the theory (Myers & McCaulley, 1985).

Likewise, this sample represented a group of 40 experienced nurses working within a hospital setting with preferences for sensing, feeling, and judging. Although the sample was one of convenience, data revealed a homogenous group which allows generalizing to larger populations. Additionally, samples of nurses in the MBTI data bank reveal the same preferences, which supports the ability to generalize findings. It seems logical that other rural areas would have nurses with similar personality types. Furthermore, the culture of the rural area might suggest that nurses would be more sociable and friendly because rural hospital nurses generally know their patients.

Long (1993) discusses the differences in urban and rural cultures. People residing in rural areas have a tendency to be more independent and self-reliant. They tend to seek health care less frequently than urban residents. When addressing health care needs, nurses are challenged to develop interventions and health promotion strategies that fit the client’s definition of his health care needs. Nursing, as a discipline, has always addressed the issue of understanding the client’s perspective and collaborating with the client in addressing health care needs. Research indicates that nurses in rural communities tend to be especially sensitive to the various needs of communities and to the meanings of health within the environmental context (Bigbee, 1993; Boettcher, 1993; Long, 1993). Bigbee (1993) states,
Rural nursing is a unique and challenging field of nursing that requires a “special breed” of nurse that is committed to high quality, comprehensive care at the individual, family, and community levels. The unique characteristics of rural nursing include close interaction with the community, a truly generalist approach, and increased autonomy, cohesiveness, and community visibility. (p. 142)

One must consider that the nurse population within a rural community might differ from those residing in urban communities. One expects these nurses to personally know many of their patients and families. Likewise, the patients have some knowledge about the values and practices of the nurses working within a small rural hospital. People with preferences for sensing and feeling are sympathetic and friendly types. Additionally, individuals with preferences for sensing and judging are realistic decision-makers. Extraverted sensing characteristics are those of action-oriented realists. All of these personality characteristics are beneficial to nurses and especially to those nurses working in rural settings where resources are not always as readily available as in urban areas.

The second research question, what is the most common personality type of medical surgical nurses in a rural hospital, revealed that ISFJ was the most frequently occurring type among the 10 medical surgical nurses participating in the study. Medical surgical staff nurses are often thought of as those nurses practicing in the traditional role of a nurse. It would have been interesting to compare the medical surgical nurses to the other specialty areas. However, this group of medical surgical nurses was too small due to the fact that less than half of the medical surgical nurses chose to participate in the study (45%). Therefore, it was not possible to analyze personality preferences between
findings revealed that 8 of the 10 participating medical surgical nurses preferred sensing over intuition and 7 preferred feeling over thinking. Six preferred judgment over perception and 6 preferred introversion over extraversion. These are the very same preferences identified for nurses in the MBTI data bank which indicates that even though the sample size was small it was representative of the traditional nurse. A comparison between medical surgical nurses and the other specialty areas would address the question whether or not true personality differences exist between these two groups. However, due to the cultural differences of the rural setting, you may not see the differences other studies have shown between critical care nurses and medical surgical nurses.

Research question 3 addressed personality preferences of the other specialty areas of nurses within a rural community hospital. Participation among the other specialty areas was much better than the medical surgical area. Sensing was preferred over intuition by 21 (70%) of the 30 nurses and 19 (63%) preferred feeling over thinking. According to previous studies, some of the specialty areas seemed to attract nurses with preferences for intuition and thinking. When all the specialty areas, of this hospital, were grouped together, nurses preferred sensing and feeling. However, due to the small size of each various specialty area in this study, it would be careless to generalize to a particular specialty.

Comparison of the Sample to the MBTI Data Bank Sample

When comparing the sample with a larger base population from the MBTI data bank, there was significantly more nurses with a preference for sensing among the sample
than was expected. There were significantly more sensing types than were expected and less intuiting ($\chi^2 = 3.8, p=.05$). Since the base population is a group from the MBTI data bank (no specialty stated), one must consider that this group probably contains some management and administrative nurses which research has already indicated have different preferences from staff nurses. Also, researchers suggest that some of the specialty areas are more attractive to nurses with preferences for intuition and thinking. More of these nurses may have been represented in the larger sample from the data bank.

Also, this group represented 40 hospital staff nurses with greater than 5 years in nursing which might indicate a more stable personality for registered nurses. Researchers have found that nurses in traditional roles tend to prefer sensing and feeling. Although conclusions cannot be drawn regarding the various specialty areas due to the small numbers of nurses employed in the small departments, one would expect them to be representative of rural nurses working in the various specialty areas. One must consider that the specialty units within a small rural hospital would not be the same as the units of the large urban hospitals. Therefore, it would not be practical to compare the nurse working within the critical care unit of a rural hospital to the nurse working in the critical care unit of an urban hospital. Two crucial differences between the critical care units of rural and urban hospitals include the following: nurses in rural hospitals are likely to know their patients and the technology is not as high as that in urban facilities.

Although not statistically significant, the sample of rural nurses showed a greater preference for extraversion over introversion which is different from the MBTI data base sample. In Macdaid, McCaulley, and Kainz (1986), the MBTI data bank sample of 1,880
registered nurses (no specialty stated) preferred introversion (53.62%) over extraversion. However, this margin was a minimal one, as was the sample in this study, between the preferences of extraversion over introversion. The conflicting reports as to nurses personality preferences on the extraversion introversion scale indicates a need for validation studies, more studies of nurses in general with the strength of the preferences included in the study. Studies between the nurses MBTI and self-selection results might indicate whether or not the nurses were answering the MBTI as they normally function at work.

Limitations

As revealed in the methods chapter, the major methodological limitation of the study was utilizing a convenience sample from one hospital. In order to be cost effective, convenient to the staff, and work within the limitations imposed by the study, the researcher chose to utilize a volunteer sample of nurses. Although this sample was one of convenience, demographics revealed that it was a homogenous sample of experienced nurses working in a rural community. Male nurses were in the minority. However, given overall statistics of female to male ratios in nursing, a male minority was to be expected. Also, various ethnic groups were not represented. Other rural communities may reveal different preferences if different races were more represented.

Recommendations for Further Study

Studies using a larger sample taken form several different rural hospitals would be beneficial. Additionally, personality types of nurses practicing in rural settings other than the hospital would be interesting. What personality types of nurses specialize in office or
home health settings in remote areas? Comparison studies between the specialty areas and medical surgical nursing would begin to address the question whether or not true personality differences exist between groups of nurses in certain specialties and those choosing to practice in the more traditional roles of nursing. The limited amount of available research tended to indicate that such differences exist. Further studies to examine the influence of the nurse’s previous experience and specific reasons for choosing a particular speciality area as well as job satisfaction may help guide new nurses toward a more satisfying role based on their particular personality types. This information would be beneficial to career counselors and to all interested in a deeper understanding of personality.

Summary

In this study, a descriptive design was used for the purpose of determining the personality types of registered nurses at a 68 bed acute care hospital in a rural community. The findings indicated that the personality preferences of rural hospital nurses included sensing, feeling, and judging.
REFERENCES


APPENDIXES
APPENDIX A

Letter of Approval from Western Kentucky University Institutional Review Board

for human subjects of research
February 12, 1997

Tina Snodgrass  
c/o Dr. Mary Hazzard  
Academic Complex 312  
Western Kentucky University

Dear Ms. Snodgrass:

Your research topic “Personality Types of Registered Nurses Employed in a Rural Community Hospital,” has undergone review by the Western Kentucky University IRB for human subjects of research and it has been determined that risks to subjects are: (1) minimized and reasonable; and that (2) research procedures are consistent with a sound research design and do not expose the subjects to unnecessary risk. Reviewers determined that: (1) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (2) selection of subjects is equitable; and (3) the purposes of the research and the research setting is amenable to subjects’ welfare and producing desired outcomes; that indications of coercion or prejudice are absent, and that participation is clearly voluntary.

In addition, the IRB found that: (1) informed consent will be sought and documented from each prospective subject; (2) provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data; and (3) that appropriate safeguards are included to protect the rights and welfare of the subjects. Please store all data securely at an on campus location for a minimum of three years.

Your research therefore meets the criteria of expedited review under the institutional human subjects protocol and is approved. Copies of your request for human subjects review, your application, and this approval, are maintained in the Office Sponsored Programs at the above address.

Kindest regards.

Sincerely,

[Signature]

Phillip E. Myers, Ph.D., Director  
Office of Sponsored Programs and  
Human Subjects Coordinator
APPENDIX  B

Letter of Approval from participating hospital
February 27, 1997

Tina Snodgrass
Address

Dear Tina,

The Ethics Committee of ____________ met February 18, 1997 and I am pleased to inform you that approval has been granted to conduct your research project related to the Myers Briggs Personality Typing of our nursing staff as previously discussed. We concur with the Human Subjects Review Board of Western Kentucky University that necessary steps are planned to protect the privacy of the staff who volunteer for your project. In addition, we are hopeful this study results in a better understanding of personality types which will improve the communication skills of those involved.

You may contact ____________, Director of Patient Services to make arrangements for contacting the nursing staff to solicit their participation. Nurses who participate in this project will be paid by the hospital for the time taken to administer the test and for the associated two hour feedback sessions.

If you have further questions, feel free to contact me or ____________.

Sincerely,

Administrator

Note: This letter was retyped eliminating letterhead, addresses, name of institution, and names of employees attempting to provide anonymity for the facility and staff.
APPENDIX C

Demographic Questionnaire
Demographic information

Instructions: Please circle the letter of the response that best applies to you. Circle only one response in each category. Thank you.

Nursing Specialty:  
A. Medical Surgical Floor  
B. Critical Care Unit  
C. Operating Room  
D. Emergency Room  
E. Other

Educational Preparation:  
A. Diploma  
B. A.D. in Nursing  
C. B.S. in Nursing  
D. M.S. in Nursing  
E. Other (please specify)

Years in Specialty:  
A. Less than one  
B. 1 - 2  
C. 2 - 3  
D. 3 - 5  
E. Over 5

Years in Nursing:  
A. Less than one  
B. 1 - 5  
C. 6 - 10  
D. 11 - 15  
E. Over 15

Employment Status:  
A. Full-time  
B. Part-time  
C. PRN

Shift Worked:  
A. Days  
B. Evenings  
C. Nights

Sex:  
A. Male  
B. Female

Race (optional):  
A. African-American  
B. Caucasian  
C. Hispanic  
D. Other (please specify).

Marital Status:  
A. Single  
B. Married  
C. Separated  
D. Divorced  
E. Widow

Age (please specify):    


APPENDIX D

Myers-Briggs Type Indicator (MBTI)
Myers-Briggs Type Indicator (MBTI) Form G

The MBTI is proprietary and cannot be reproduced here. For information regarding the MBTI contact: Consulting Psychologists Press, Inc.
3803 E. Bayshore Road
Palo Alto, CA 94303
APPENDIX E

Consent Form
INFORMED CONSENT DOCUMENT
(Note: This format is suggested by the HSRB)

Project Title: Personality Preferences of Registered Nurses Employed in a Rural Community Hospital

Investigator: Tina L. Snodgrass  Nursing Department  (502)745-3391 or (502)274-7840

You are being asked to participate in a research project for a thesis conducted through Western Kentucky University. The University requires that you give your signed agreement to participate in this project.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. There are 2 copies please keep one for yourself and give one to the researcher.

1. Nature and Purpose of the Project:

The purpose of this study is to examine the personality type of registered nurses.

2. Explanation of Procedures:

Each nurse will be given the Myers-Briggs Type Indicator (MBTI) Form G Booklet and Profile Report Form (answer sheet) and a demographics questionnaire. After completing the questionnaires, the participate may attend a 2 hour feedback session if he/she wishes to receive their individual results from the MBTI. At the feedback session, you will receive information on all the personality preferences. You will be asked to self-select the preferences that seem most like you. Then, you will be given your individual results as computed from the MBTI. Please remember if you wish to receive your individual results, you must present the code number from your answer sheet to the researcher at the feedback session. The researcher will be available to answer questions during and after the feedback session. The book entitled Introduction to Type written by Isabel Briggs Myers will be distributed at the feedback session. It is yours to borrow. Please return the book to administration after reading for co-workers to borrow.

3. Discomfort and Risks:

It will take approximately 30-40 minutes of your time to complete the MBTI. If you wish to receive your individual results you must attend a 2 hour feedback session. Another 5-10 minutes will be required to complete the demographic questionnaire. The MBTI is not a test. There are no right or wrong answers. Your answers will show how you like to look at things and how you go about deciding things. Some people may feel anxious about revealing information about personal preferences such as how you go about deciding things. Please be reassured that your results will not be known by anyone which adds extra assurance regarding confidentiality. Only you will choose who you want to share those with. As
discussed earlier, the results will be grouped together for use in a research project. However, no small units or departments will be broken apart; thereby, again protecting anonymity and confidentiality.

4. Benefits:

The MBTI will help you to identify your strengths. You can use the information to better understand yourself, your strengths, and potential areas for growth. It will also help you to better understand and appreciate those who differ from you. Your MBTI will be individually scored and interpreted by a qualified professional. You will receive your results on the Myers-Briggs Type Indicator personality inventory through a feedback session free of charge.

5. Confidentiality:

The researcher will be the only person with access to the MBTI results. The researcher will personally score each report form (answer sheet) and return the results to you during the feedback session. These results will be claimed by a code number. The investigator will not be able to return your individual results without this code number; therefore guaranteeing your confidentiality. Nurses preferences will be reported in aggregate form and used in a thesis to identify the most frequently occurring personality types of nurses from a rural hospital. Some departments may be reported in aggregate form. However, no departments of less than 5 people will be reported as a group which assures anonymity for individual members.

6. Refusal/Withdrawal:

Refusal to participate in this study will have no effect on any future services you may be entitled to from hospital or the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

I understand also that it is not possible to identify all potential risks in an experimental procedure, and I believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Signature of Participant ___________________________ Date ________

Witness ___________________________ Date ________

THE DATED APPROVAL STAMP ON THIS CONSENT FORM INDICATES THAT THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH (602) 523-3889.