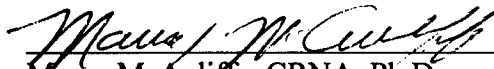## REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE 22.Oct.98	3. REPORT TYPE AND DATES COVERED THESIS

4. TITLE AND SUBTITLE
PERSONALITY TRAITS OF NURSES IN ANESTHESIA AND FAMILY NURSE PRACTITIONER MASTERS DEGREE PROGRAMS

5. FUNDING NUMBERS

6. AUTHOR(S)
MAJ MOORE KELLY C

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
UNIFORMED SERVICES UNIV OF HEALTH SCIENC

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
THE DEPARTMENT OF THE AIR FORCE
AFIT/CIA, BLDG 125
2950 P STREET
WPAFB OH 45433

10. SPONSORING/MONITORING AGENCY REPORT NUMBER
98-116

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION AVAILABILITY STATEMENT
Unlimited distribution
In Accordance With AFI 35-205/AFIT Sup 1

12b. DISTRIBUTION CODE

19990106 046

13. ABSTRACT *(Maximum 200 words)*

14. SUBJECT TERMS

15. NUMBER OF PAGES

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

-Thesis Approval Form

PERSONALITY TRAITS OF NURSES IN ANESTHESIA AND FAMILY NURSE
PRACTITIONER MASTERS DEGREE PROGRAMS

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ABSTRACT

Personality types have been consistently linked to occupational choices. Studies using the Myers-Briggs Type Indicator (MBTI) have dependable findings when evaluating personality types. The MBTI is a psychometrically sound instrument designed to identify theoretical constructs of Carl Jung's personality typology. The purpose of this study is to describe the personality attributes found in Student Registered Nurse Anesthetist (SRNAs) and Student Family Nurse Practitioners (SFNPs) before they start their graduate programs. Knowledge of personality traits of the two groups carries the possibility of creating educational programs for practitioners to institute in their various academic studies. The research question is to describe the personality traits of nurses in anesthesia and family nurse practitioner masters degree programs. This descriptive study used the MBTI and involved uniformed service nurses who were selected for the Uniformed Service University of the Health Sciences (USUHS) nurse anesthetist and family nurse practitioner programs. Evaluation of the SRNAs, 33% fell into the personality typology designated for "military" types and 25% were found to be in the "nurse" personality type. As the inventory was given to military nurses, these results are not surprising. An analysis of SFNPs data, showed that 15% of students belonged in the military group, 23% into the nursing category, and 31% in a category similar to that of general practitioner's. This is interesting because family nurse practitoners do similar tasks and and work in the same environment as their counterpart general practitioner physicians. Evaluation of the discrete composite groups of the SRNAs and the SFNPs together found that both groups of were similar. The majority of subjects were the extroverted-sensing-thinking-judging (ESTJ) composite

prototype. ESTJ students tend to be rather scholarly. They respond best to well structured courses that produce practical, tangible results. Their academic prowess continues up the academic ladder, although they tend to have less patience with the more abstract theories at the college level. They are frustrated by intuitive-perceiving professors whose lectures do not follow stated outlines and whose material is not limited to the factual and concrete. The fact that these nurses generally fell into the nursing and military prototypes adds validity to the instrument. Once personality types of students are known, faculty can initiate programs to help the students better understand the methods of teaching, test taking, and communicating. This valuable information could then be integrated into the educational curriculum.

PERSONALITY TRAITS OF NURSES IN ANESTHESIA AND

FAMILY NURSE PRACTITIONER MASTERS

DEGREE PROGRAMS

by

Kelley C. Moore, RN, BSN, MA

THESIS

Submitted in partial fulfillment of

the requirements for the

MASTER OF SCIENCE IN NURSING

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Bethesda, Maryland

February 1998

ACKNOWLEDGMENTS

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CHAPTER 1

INTRODUCTION

Nurses have diverse occupational choices. Some work in homes of clients, or hospitals, management, and in sales of health care products. Many are expert clinicians, instructors, and educators. Many choose to further their careers by acquiring on advanced clinical skills such as nurse anesthesia, family nurse practitioner or nurse midwifery. Nurses are drawn to specific career fields because they are interested in the job content, and the personalities of those in a particular occupation are often quite similar. Personality types and temperament clearly impact career choices as well as how we work with others. Many nurses, undoubtedly, have similar personality types. What specific personality traits do lead one nurse choosing an advanced degree as a nurse anesthetist and another choosing a different career tract as a family nurse practitioner?

Personality types have been consistently linked to occupational choices (Holland, 1985). Studies using the Myers-Briggs Type Indicator (MBTI) have dependable findings when evaluating nurses personality types (Myers & McCaulley, 1985). "The Myers-Briggs Type Indicator is a psychometrically sound instrument designed to identify theoretical constructs of Carl Jung's personality typology" (Miller, 1993, p.599). The MBTI is a way of understanding universal personality preferences. This inventory was developed to fill in the gaps between observed personality behaviors and the reasons for those behaviors. It was developed by Isabel Myers based on the work of Jung and Katharine Briggs (Schoessler, Conedera &Bell, 1993).

Statement of the Problem

Are there significant be personality differences between student registered nurse anesthetists (SRNA) and student family nurse practitioners (SFNP) that draw them into their career choices? Students entering nurse anesthesia and family nurse practitioner programs are selected on the basis of academic success. Because of the availability of a Masters of Science degree in Nursing, Air Force military applications for entry into nurse anesthesia programs Have increased 100% (Bullard, 1991). Currently, admission boards use scholastic achievement and other cognitive skills when making selections for their programs. However, little or no information is provided about the noncognitive characteristics of applicants, e.g., personality attributes and values (Givner, 1985). Knowledge of psychological type and type development theory might be useful to the educator in understanding students and providing a rationale for predicting some, but certainly not all, important behaviors (Lynch, 1985). Givner (1985) has noted that accepting the most academically competent applicants to medical school does not ensure that the applicants will also be superior to nonaccepted applicants in terms of personal characteristics.

Cohen (1981) posits that practitioners respond more positively to students most like themselves and, students are more likely to trust instructors whose values agree with their own. Unfortunately, students whose personalities differ from those of the professional group may be excluded from the dominant student culture and labeled as troublemakers by both peers and faculty (Rovinski, 1990). And, often, individuals whose personalities do not fit with those of their peers are forced from the workplace (Cohen, 1981).

Nurses who have been selected for a particular program are often reluctant to opt for withdrawal even in the face of increasing stress or maladaptation (Rovinski, 1990). A study by Gulack of nearly 3,000 registered nurses revealed the complicating factor that 58% of those working were the sole support of themselves or their families (Gulack, 1983). If nurse anesthetists or family nurse practitioners find that they are not suited for the career field they have chosen, and do opt for withdrawal, much time, effort and money have been wasted by both student and the institution.

Students who elect to stay in the chosen specialty even though their personality traits are not suitable for the job find themselves in a potentially disastrous situation. Attempts to alleviate stress often involve alcohol and drugs. Most nurses who abuse alcohol and drugs are the high achievers, the so-called super nurse (Cross, 1985), and most hold advanced degrees (Abbott, 1987). It has been shown that anesthesiologists, as a group, are more prone to alcohol and drug addiction than other medical specialties with the exception of psychiatrists (McAuliffe, 1984). If students do not enjoy working in their chosen field, the stress of the job and the resulting dissatisfaction may well could lead to use of alcohol and drugs. In a study of addictive tendencies among nurse anesthetists, McDonough (1990) found that the major difference between the nurse anesthesia group and the non-anesthetist sample was that more anesthetists had addictive tendencies. The use of alcohol and drugs by certified registered nurse anesthetists (CRNA) or family nurse practitioners (FNP) pose great danger to themselves and their patients as a result of their impaired judgment.

Because SRNAs and SFNPs are in the stressful situation of graduate school and are high achievers, it is important to know their personality traits so faculty can help them better adapt

to their role as students. Once the personality types of SRNAs and SFNPs are known, the faculty can initiate programs to help the students better understand the methods of teaching, test taking, and communicating. This valuable information could then be integrated into the educational curriculum and eventually it is hoped to better CRNA and FNPs. A better understanding of an individual's personality characteristics can help the faculty to guide the student and make the learning experience rewarding. Knowledge of personality types and understanding one's own traits is educational and enlightening. "In work situations, the MBTI has been used to help individuals learn how to "talk the language" of and work with different people, to create a climate where differences are seen as valuable rather than problematic, and to construct working groups with sufficient diversity to solve problems and learn from each other" (Freund, 1988, p. 5).

Purpose of the Study

The purpose of this study is to describe the personality attributes of SRNAs and SFNPs before they start their graduate programs. The MBTI allows one an in-depth look at personal traits that may lead to a realization of what may help the student to better enjoy academic studies and make more productive use of time. With the results of the inventory, students may recognize that the curriculum content may cause learning difficulties and lessen enjoyment of the course. Studies based on the MBTI have shown to accurately predict whether students will adjust to their roles in specific educational fields (Saunders, 1960).

Research Question

The research question is to describe the personality traits of nurses in anesthesia and family nurse practitioner masters degree programs.

<u>Definitions of Terms</u>

1. <u>Anesthesiology</u> is the art and science of inducing a state of insensibility to pain in a given client by the administration of selected drugs.

2. <u>Certified Registered Nurse Anesthetist (CRNA)</u> is one who has graduated from an accredited nurse anesthesia educational program and has successfully passed a national certification.

3. <u>Family Nurse Practitioner (FNP)</u> is a registered nurse who has met advanced educational and clinical practice requirements and has passed national certification in an advanced practice area.

4. <u>Myers-Briggs Type Indicator</u> is an instrument that measures differences in personality That reflect focus of attention, processing of information, decision-making strategy, and the lifestyle. It is a widely used tool, that has adequate reliability and validity.

5. <u>Cognitive characteristics</u> are those attributes that are indicative of intelligence or academic achievement.

6. <u>Noncognitive characteristics are</u> those characteristics that are indicative of personality, attributes, values, and motivation.

7. <u>Personality traits</u> are the characteristics of an individuals behavioral conditions and emotional status.

8. <u>Student Family Nurse Practitioner (SFNP)</u> is a student enrolled in a nurse practitioner educational program.

9. <u>Student Registered Nurse Anesthetist (SRNA)</u> is a student enrolled in a nurse anesthesia

educational program.

Assumptions

1. MBTI is a tool that measures personality types.

2. Students' cognitive and noncognitive characteristics may be beneficial to know upon

   entry to graduate nursing specialties.

Limitations

1. Not all branches of the uniformed service may be represented in the groups of SRNAs or

   SFNPs.

2. Because the study excluded civilian practitioners, the results may be applicable only to

   nurses in the uniformed services.

3. As the study is done with United States citizens, results may not be generalizable to

   nurses in other countries.

4. The small sample size may limit analysis of the data.

Summary

Personality differences can play an important role for nurses in choosing their field of

specialization. Nurses who have a combination of high scholastic achievement and a

personality that clincides with other people in that profession have greater job satisfaction and

success. A better understanding of personality types can help the faculty design programs to

meetthe needs of their students.

CHAPTER 2

REVIEW OF THE LITERATURE

In the few years that the MBTI has been generally available to practitioners, a number of applications in higher education have been explored. The MBTI is based on the work of Carl Jung. The first studies done by Isabel Myers looked at college students in a medical school. Within several years, Myers (1992) had MBTI results for more than 5,000 medical students and 10,000 nurses. The organized psychology profession paid little attention to Myers' findings. Even so, she continued to give the MBTI to college students throughout the 1950s and 1960s. Myers' work finally, attracted some attention from a few experts over the next several years, and in 1975 the MBTI was transferred to Consulting Psychologists Press, and the Center for Applications of Psychological Type was organized as a research laboratory for the Indicator (Myers, 1992). In 1986, the Consulting Psychologists Press sold approximately 1,500,000 blank answer sheets, and data is still being collected in institutions of higher education (Provost & Anchors, 1987).

Myers believed that there are differences in people that are not readily apparent. "Knowing about psychological type and type development theory will help the practitioner understand students and give a rationale for predicting some, but certainly not all, important behaviors" (Provost & Anchors, 1987, p. 7). The merit of the theory underlying the MBTI is that it enables us to expect specific differences in specific people and to cope with people and their differences more constructively (Myers & McCaulley, 1985). The Jung/Myers type theorem are constructs of hypothesized mental processes presumably explanatory of outward noticeable behaviors. "The Jung/Myers conception is said to be "dynamic," and as such the faculties, functions or

parts have energy of their own and are thought to combine, interact or even change" (Giovannoni, Berens, & Cooper, 1990, p. 13). As Myers (1980b) has explained, "Within limits, type development can substitute for intelligence, because average intelligence fully utilized through fine type development will give results above expectation" (p. 186).

The MBTI is a self-report inventory developed to measure the variables in Jung's personality typology. It consists of four scales: extroversion-introversion (E-I), sensation-intuition (S-N), thinking-feeling (T-F), and judgment-perception (J-P). The MBTI is based on Carl Jung's theory that much apparently random variation in human behavior is actually quite orderly and consistent, and driven by certain basic differences in the way people approach life. The underlying assumption is that every person has a natural preference for one or the other pole on each of the four indices.

There are 16 personality types, too many to keep in mind solely by memory. Their distinguishing qualities can best be seen by comparison and contrast. The easiest way to remember what is read and observed about each type is to populate a Type Table.

The Type Table is a device for seeing all the personality types in relation to each other. It arranges the types so that those in specific areas of the Type Table have certain preferences in common and share whatever qualities arise from those preferences. It is much easier to look at a table to see the groupings of family, friends, coworkers, professionals than to read the personality types of each person.

The great convenience in using the Type Table is to know immediately where each type is found. The following is an outline of how the Type Table is divided and grouped.

The sensing (S) and intuitive (N) types are divided into half. The sensing types are placed in

the left half, and the intuitive types go in the right half.

Feelers (F) are placed side by side in the middle, and the thinkers (T), in the two columns on the outside locations. This arrangement reflects the closer relationships feeling types have with other people, whereas thinking types are more detached.

The next step is to divide the extroverts (E) and the introverts (I). The extrovert types who can be thought of as being more open, accessible, communicative, and friendly, are set in the lower or southern half. The introverts are set in the upper or northern half of the Type Table.

The final division is the judgers (J), who are placed in the top and bottom horizontal row, and the perceptive (P) types who occupy the two middle horizontal rows. The Type Tables easily demonstrate similarities of groups and differences. Shading the areas of similarities is also helpful to identify the areas of commonalities (see Table 1).

Table 1.

Type Table

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

The MBTI has been widely used and has recognized adequate reliability and validity (Myers & McCaulley, 1985). Extensive work has been done on construction of the MBTI items and

scales and on the reliability and validity of the instrument. Consequently, there is an impressive amount of evidence on the MBTI's reliability and validity (Freund, 1988, p. 10).

Content validity was established by Bradway (1964) involving 28 Jungian analysts. The analysts were asked to classify themselves according to the extrovert-introvert (E-I), sensing-intuitive (S-N), and thinking-feeling (T-F) type categories, and comparisons were then made between self-typing and MBTI typing. There was 100% agreement on E-I classification, 68% agreement on S-N classification, 61% agreement on T-F classification, and 43% agreement on all three dimensions.

Additional evidence for content validity has been obtained by correlating subjects' MBTI scores with their scores on the Gray-Wheelwight Questionnaire, another instrument designed to identify Jungian types. The Gray-Wheelwight is similar to the Indicator in that it uses continuous scores to assign subjects to type categories, but has no J-P scale (Gray & Wheelwright, 1946).

Carlyn (1997) has noted that a number of researchers have investigated the reliability of the Myers-Briggs Type Indicator, some treating MBTI scores as dichotomous type categories and some treating scores as continuous data. A variety of statistical procedures have been employed making it rather difficult to compare findings. Two aspects of reliability have been examined: measures of internal consistency and measures of stability.

A variety of statistical procedures have been used to measure the internal consistency of the dichotomous type categories of the Myers-Briggs Type Indicator. One approach, reported by Myers (1962) and Webb (1964), has been to estimate split-half reliabilities by calculating phi correlation coefficients and applying the Spearman-Brown prophecy formula. The phi

coefficient, however, is likely to underestimate the reliability of a particular type category.

Myers' (1962 recommendation was to estimate split-half reliabilities by calculating tetrachoric correlation coefficients and applying the Spearman-Brown prophecy formula. This approach yields higher reliabilities, for it assumes additional information: The underlying scores are normally distributed across each index.

For any particular sample, actual type-category reliabilities can be expected to fall somewhere between estimates derived with phi coefficients and estimates derived with tetrachoric coefficients. Researchers estimating the reliability of the type categories (Hoffman, 1974; Myers, 1962; Webb, 1964) have reported phi coefficients ranging from .55 to .65 (E-I), .64 to .73 (S-N), .43 to .75 (T-F), and .58 to .84 (J-P). Tetrachoric coefficients have been reported ranging from .70 to .81 (E-I), .82 to.92 (S-N), .66 to .90 (T-F), and .76 to .84 (J-P). Estimated reliabilities of type categories appear to be satisfactory in most cases, although there is a rather wide range between conservative and liberal estimates of internal consistency.

Researchers have used various methods to estimate the reliability of continuous scores. Myers (1962) developed a split-half procedure involving Pearson product-moment correlation, Webb (1964) used a split-half procedure similar to Myers' method, and Stricker and Ross (1963) used Cronbach's Coefficient Alpha. The three procedures have produced similar results, with reported coefficients ranging from .76 to .82 (E-I), .75 to .87 (S-N), .69 to .86 (T-F), and .80 to .84 (J-P). Estimated reliabilities of continuous scores are somewhat higher than estimates of type-category reliability because information is lost in changing from continuous scores to dichotomous categories.

Test-retest data for MBTI type-category scores have been reported for four samples: Studies

by Levy, Murphy, and Carlson (1972), Stalcup (1968), and Stricker and Ross (1964a) involved college students, and a study by Wright (1966) involved elementary school teachers. In every case the proportion of agreement was significantly higher than would be expected by chance.

College populations appear to have maintained reasonably stable scores over a period of time with a clear majority of the subjects displaying either complete stability or a shift in only one of the four basic variables (Carlyn, 1977).

Wright's (1966) study of 94 elementary teachers is even more impressive. When the teachers were retested six years after they had originally taken the Indicator, 61% of them remained in the same category on all four scales, Also, each of the four scales appeared highly stable when considered separately. Wright's findings indicate that the test-retest correlations for type categories may be exceptionally high for teachers who remain in the same school district for at least six years.

Once the Consulting Psychologists Press (CPP) became the publisher, the Indicator was made available to qualified professionals. The Indicator's validity and reliability established it as a stable and effective tool for application as well as research. The university research in the '1960s and 19'70s, the availability of the MBTI through CPP, and the leadership of Center for Application of Psychological Type (CAPT) stimulated a rapid upsurge of its use in higher education. "According to CPP, no other psychological instrument has had such a dramatic increase in use" (Provost & Anchors, 1987, p. 3).

The MBTI can be used in virtually every profession and by every student to help them better understand themselves and the appropriate work choice. The MBTI is used by career counselors. In fact, the MBTI can be one of the counselor's most valuable tools in assisting

individuals to make their important life decisions. The MBTI provides insight to both the individual and the counselor about the individual's behavioral patterns and problem-solving strengths (Provost & Anchors, 1987). Knowledge of personality type can assist the advisor in making decisions about an individual's preference for career fields. Research supports the notion that particular types tend to be attracted to or perform well in certain occupations (Myers & McCaulley, 1985).

The MBTI has been used to predict choice of academic major and success in college. Conary (1966) predicted that certain specific personality types in his sample of 1709 entering freshmen would be more likely to receive good grades and to make specific curricula choices during their freshman year. The predictions were substantiated. Goldschmid (1967) used regression equations to forecast the college majors for two samples of undergraduates and found that the Indicator's scales had moderate predictive validity. Eicke, Blake, and Repogle (1993) evaluated 44 residents with both the MBTI and the Sixteen Personality Factor Questionnaire (16PF). Results showed E/I variables of the MBTI and 16PF are highly correlated. Other variables on the 16PF and MBTI are also correlated.

Personality type seems to be related to college drop-out rates. In one study, the mean Medical College Admission Test scores for the perceptive (P) students and the judging (J) students were identical. However, the perceptive (P) types had a drop-out rate of only 3.1 per cent, while the judging (J) types had a drop-out rate of 5.0 per cent. Myers theorized that perceptive students may have had more accurate perceptions of themselves and their careers and, therefore, made choices, that were less likely to result in failure (Myers, 1992).

Costello (1993) found that by taking the MBTI managers were more aware of their

preferences and how they affected their approach to work and staff members. In this study interviews were conducted with four nurse managers, and along with the MBTI results, a practical application was demonstrated. The interviews demonstrated how the managers used their own personality types to problem solve and understand how best their staffs worked.

When the MBTI was given to office workers in an education department, it was found that an understanding of individual preferences helped group members to understand, anticipate, and work with one another. An ideal mix of profiles challenges and stimulates both the individuals and departments. It was found that an awareness of others' traits and styles enabled workers to recognize strengths and weakness. Workers were able to discuss their diversities in work habits' therefore, making coexistence possible (Schoessler, et al 1993).

Freund (1988) said, " It is important to remember that the MBTI is not a diagnostic or ·evaluative tool. The results do not indicate that respondents are more or less normal, based on some standard of normalcy. Rather, they indicate important patterns and preferences in the way people take in information and make decisions" (p. 10). She concludes," Once individuals understand and accept their own type, they can begin understanding and respecting others of different types. The MBTI is best used in small groups or work teams, with people who work together frequently. It opens up new avenues of communication and understanding, and not only enhances the problem-solving process, but also improves outcomes and decisions" (p. 11).

Numerous studies have been conducted using subjects in various occupations to see which personality types are drawn to particular fields. Beidler (1986) studied 18 university professors. The professors were chosen by the Council for the Advancement and Support of Education (CASE) for their outstanding capabilities in teaching. Although the sample was small and

selective, several MBTI patterns are worth noting. Of the 18 professors, 9 were extroverts-thinkers-judgment (ETJ) and 7 of these were extroverts-intuitive-thinkers-judgers (ENTJ). The four women in the sample were introverts-intuitive-feeling-judging (INFJ), introvert-intuitive-feeling-perceptive (INFP), extrovert-intuitive-feeling-judging (ENFJ), and extrovert-intuitive-thinking-judging (ENTJ). There were few sensing (S) types, which was consistent with a larger university sample. There were four times as many ENTJs in the CASE sample than would be predicted based on the percentage of this type in the CAPT university Professors sample of 2,282. Compared to the percentages of each type in a sample of Danforth Associates, there are two times as many ENTJs and four and a half times as many ENFPs than would be expected. These findings are statistically significant" (Provost, Carson, & Beidler, 1987, p. 225). Of the 18 professors, 7 in the ENTJ category were found t have certain common characteristics. They tended to enjoy power, and concluded that this gave them a great deal of vitality. They wanted to inspire their students. They believed that their teaching style was tough-minded and logical.

Personality is one variable that correlates with job selection and practice type. One study was conducted to assess changes in personality types of individuals entering a specialty over time. The MBTI was given to 30 residents and 48 graduates of a Physical Medicine and Rehabilitation (PM&R) program to test the hypothesis that a change in the personality type of those entering the program occurs, as well as to identify academic potential. Findings supported the hypothesis that personalities change over time. It also found a significant number of both graduates and residents who displayed the personality index associated with research and academic careers, and accordingly, recommended training in areas necessary for academic practice to be a part of the residency programs. "These changing personality characteristics are

important in the recruitment of students into our program and in planning educational offerings, because personality also influences learning style" (Sliwa and Shade-Zeldow,1994, p. 312).

Yufit, Pollock, & Wasserman (1969) divided medical specialties into people-oriented and technique-oriented groups. Using the intimacy-isolation dimension of the Edwards Personality Profile, the authors were able to predict specialty choice. Their ten year follow-up study showed that students who were comfortable with people and had an interest in helping others were in people-oriented specialties, whereas students who were less comfortable in dealing with people chose technique-oriented specialties.

One of the most common personality measures used in the study of personality within medicine is the MBTI. In the early 1950s, the MBTI was administered to over 5300 medical students from 45 medical schools with follow-up for specialty choice 12 and 22 years later. In both follow-up studies, a correlation between medical specialty and characteristics on the MBTI was noted (Myers & Davis 1964). More recently 521 medical students at the University of North Carolina School of Medicine were administered the MBTI, and the correlation between specialty choice and personality type was confirmed (Friedman, 1988).

Many studies have reported the investigation of personality characteristics in other health care specialties. One such study found that personalities of surgical residents coincided with those of students selecting a surgical career and that these personalities were markedly similar to the commonly accepted personality of the surgical practitioner (Schenk, 1988). Another study involving operating room nurses indicated a positive relationship between personality and job satisfaction (Hart, 1988).

Hanson and Chater (1983) investigated the premise that women in nursing seek professional

roles that permit the expression of their personalities. Their findings indicated that subjects who exhibited managerial interests were more practical-minded, sociable, conforming, dominant, expressive, and had more occupational interests than those who did not exhibit such interest. Hanson and Chater suggest, "If nurses exhibiting personal characteristics congruent with those of managers in general actually assumed managerial positions, the expectation is that they show greater job satisfaction, stability, and achievement than nurses whose personal attributes were not congruent with managerial characteristics" (p. 52).

Allen (1995) believes that there are more to nurses talents than just skills and competencies. One talent of which she speaks is to the different personality types of nurses. A mix of personalities is important to facilitate a good working environment for patient care and job satisfaction. "Providing a wide range of personality types is perhaps as important as providing a range of traditional nursing skills for a truly holistic approach to care" (p. 56).

Jain and Lall (1996) conducted a study on nurses' personality types using the MBTI and results were consistent with previous studies. A combined personality type of SFJ was found for 15 of 34 nurses. Other studies using the MBTI have found consistent personality types among nurses. For example, Hodges (1988) also found that nurses often classified in the SFJ types.

A study was conducted at the University of Utah Family Practice Residency Program to determine if residents in a family practice program had the same personality types as practicing rural primary care physicians. The MBTI was administered to both incoming residents and established physicians, the results showed that the two groups differed significantly. This raised the concern that many family practice residents may not choose to practice in under-served

areas. Such information may be useful in Human Resource planning and in examining

admissions policies of medical schools and residencies (Harris & Ebbert, 1985).

A study conducted by Reeve (1980) compared personality characteristics of British

anesthesiology with the general population. Reeve found that the anesthesiology group tended

to be "more reserved, intelligent, assertive, serious, conscientious, self-sufficient, tense, and

less socially bold and self-assured" (p. 559).

Northwestern University Medical School examined personality traits of anesthesia trainees.

Anesthesiologists, nurse anesthetists, and anesthesia residents were asked to rank which traits

they perceived as important in the evaluation of resident performance. Respondees thought that

the six most important traits were: reliability, calmness, punctuality, emotionally stability,

decisiveness, and priority setting (Funk, Ronai, Kinzer, & Barrett, 1985).

General practitioners have been typed by the MBTI primarily as ESTJs and secondarily as

ISFPs (Myers, 1992). As family nurse practitioners' roles are similar, they may fit into these

categories as well. Anesthesiologist fit into the ISTP type with the second highest showing in

the ISFP group. Because nurse anesthetists do the same job as anesthesiologists in many ways,

their personalities also may fit into this category. However, nurses in general fit

overwhelmingly into the SFJ group. Whether introverted or extroverted, nurses tend to fall into

the SFJ classification. Military personnel in general fall into ISTJ divisions. As the sample in

this study were military nurses in both nurse anesthetist and family nurse practitioner

programs, personality discussion centered on types found for general practitioners (ESTJ),

anesthesiologists (ISTP), nurses (SFJ), and the military force (ISTJ) will be discussed.

FNPs do jobs similar in nature and clinical function to general practitioners. Most general

practitioners are consistently in the category of ESTJ. This is not a personality type to which one would assign a benevolent family doctor. It has been surmised that the reason most general practitioners fall into this category is that they are eager to start earning money without the delay of up to five years of residency. Studies using the MBTI on medical students, have demonstrated that there are more introverts, intuitive, feeling types, and (to a lesser extent) perceptive types among medical students than in general college bound students. This INFP is completely opposite of what is found in todays' general practitioners. Again, it is believed that the high financial rewards of medicine for the professional physician took precedence over the scientific and humanitarian aspects of the work itself for the medical student (Myers, 1992).

ESTJs are life's administrators. They have a driving need to impose their judgments on the world around them with structure, schedule, and order. It is as natural and inborn for ESTJs to manage as it is for birds to fly. An ESTJ is seen as dependable, practical and able to get the job done. They are comfortable in taking charge. Decisive and opinionated, they are easy to get along with as long as they are listened to and allowed to control. ESTJ students tend to be rather scholarly students, albeit somewhat vocal and argumentative. They respond best to courses that are the most structured with practical, tangible results. "Their academic prowess continues up the academic ladder, although they tend to have less patience with the more abstract theories at the college level. They are frustrated by intuitive-perceiving professors (who dominate at the college level), whose lectures don't follow stated outlines and whose material is not limited to the factual and concrete" (Kroeger & Thuesen, 1992, p. 268).

Two slogans describing the ESTJs philosophy in the workplace are "Don't fix what ain't broken" and "Anything worth doing is worth doing well." And according to Kroeger & Thuesen

(1992), both statements drive them. ST personality types focus their attention on facts and handle these with impersonal analysis. They tend to be practical and matter-of-fact. In one sample of accountants, 64% were found to be ST (Myers, 1992). ESTJs are loyal and compulsive, they move up the administrative ladder in any organization. They are quick to venture into many areas, and develop a following of subordinates who grow to trust their take-charge nature (Kroeger & Thuesen, 1988). They look at the world with sensing rather than intuition. They are interested in the realities perceived by their five senses. "ESTJs solve problems by expertly applying and adapting past experience. They like work where they can achieve immediate, visible, and tangible results" (Myers, 1992, p. 88).

ESTJs are very conscious of the chain of command. For them, work is a series of goals, to be reached by following rules and regulations issued by the upper ranks of an organization's hierarchy. The system and its regulations are good, self-protecting, and self-perpetuating. "Extroverted thinkers construct a code of rules embodying their basic judgments about the world. They aim to live by those rules, and consider that they do so and that others should" (Myers, 1992).

In most studies, anesthesiologists tend toward the ISTP category. This personality type tends to be analytical and impersonal, primarily interested in underlying principles. They are perceptive but not dominating, as the decisiveness of their thinking usually shows only in intellectual matters. They are outwardly quiet, reserved, detached, interpersonally cautious, and perhaps even aloof except with close friends. They will try almost anything once. Inwardly the ISTPs are absorbed in the current analysis or problem. Their view of the world being more concrete, they take a more active, spontaneous role than their apparently detached nature would

seem to warrant. They may be prone to unexpected bursts of humor, a take charge attitude, or a sudden drive to fix whatever is broken . According to Kroeger & Thuesen (1988), the motto "Don't tread on me" could easily be of ISTP origin.

"ISTPs are especially skilled with their hands and often get satisfaction from accomplishments that are both tactile and immediate" (Kroeger & Thuesen, 1988, p. 230). They are inclined toward shyness, they think before they speak and are little help in small talk or social contacts. Introverts use their thinking to analyze the world, not to run it. They are logical, impersonal, objectively critical, and not likely to be convinced unless there are facts to back up the statement. Their SP preference make it possible for them to plunge into a task without feeling it necessary to follow procedures or read directions. This is how the ISTP prefers to work, and when the result is positive, the ISTP feels a wonderful sense of accomplishment.

Introverted thinkers are not apt to know how another feels unless that person speaks up. Both at the workplace and at home, the introverted thinker must remember to praise when it is due and to point out areas of agreement before proceeding to areas of disagreement. (Myers, 1992).

ISTPs become so engrossed in projects that interest them that often other obligations are abandoned. When something excites them, they work with great accuracy and precision. They thrive at working on the edge, even putting themselves at risk, if that is what is necessary to get the job done.

ISTP males and females have a tremendous gender difference. The male enjoys contact sports, heavy equipment, auto racing, and other adrenaline-driving occupations. He finds these are exciting and rewarding. The ISTP female feels no less a female at accomplishing her

aspirations in the workplace. Her concerns are more likely to arise socially. She is often cool, aloof, and socially cautious. This, combined with her interest in manual skills and activities may make others ill at ease. She can be downright threatening to her friends, partners, or colleagues (Kroeger & Thuesen, 1988).

ISTPs quietly observe and collect data on everything. They scan events and aware of whatever is occurring. When an emergency occurs, they can move swiftly to the core of the problem and correct it .

So strong is their laissez-faire attitude that they are often isolated from others. They believe everyone should have personal privacy. The ISTP has little need for social activities. "Work that is routine (such as administration) or too open-ended (such as research) is of little interest to the ISTP. This kind of work is an energy drain. The new, the unexplored, and the unexpected, however, are energizing and really not considered by the ISTP to be work at all" (Kroeger & Thuesen, 1988, p. 234).

Nurses tend to be SFJ types (Jain, & Lall, 1996). They can be both introverted or extroverted, but usually fall into the SFJ category. ISFJ nurses are systematic, thorough, and very hard working. They are the most practical of the introvert types. They base their ideas on a deep, solid accumulation of stored impressions that makes their beliefs strong and unshakable. Their use of experience adds to their stability. They accept both what they can and what they cannot do as simple facts and tend on the whole to underestimate themselves (Van der Hoop, 1939).

The ISFJ are loyal, considerate, and they make fine family doctors or nurses. Clients give them the warm feelings and reassurance they crave. In a sample of students gathered from

nursing schools from coast to coast, ISFJ showed the highest self-selection into the profession and the lowest drop-out rate during training. The low drop-out rate, according to Myers (1992) testifies to their motivation and follow-through.

ISFJs work behind the scenes. They are given to a higher sense of duty and obedience; they find their source of energy within themselves. They find meaning in life by helping and making others happy. An appropriate image of the ISFJ is one of dependability, one who is always there when needed. As judgers, they may complain about being intruded upon, but their high sense of duty compels them to do what it is that needs to be done (Kroeger & Thuesen, 1988).

ISFJs are typically careful and exact in choosing their words. Their strong sense of duty and commitment dominates their life and relationships. Spouses and friends become get angry at the ISFJ for letting others take advantage of their generosity. Relaxation can come only when all work is completed.

As students, the ISFJs prefer organized and sensible teachers and schedules. They prefer to follow outlines and to do homework and assignments that are highly defined. For them, learning, like most other aspects of life, is best when there are no unexpected events and everything happens as it should-according to schedule (Kroeger & Thuesen, 1988).

The extroverted SFJ nurse is gracious and effective in dealing with others. They bring harmony and goodwill to almost any situation in which they find themselves, yet at the same time they impose order and structure. They have a gentle and caring nature, serving others and the world around them, but giving less attention to their own needs (Kroeger & Thuesen, 1988).

The ESFJ values harmonious human contact. They are best at jobs dealing with people.

They are friendly, tactful, sympathetic and sensitive to praise and criticism. They are idealistic, loyal, and capable of great devotion to a loved person or cause (Myers, 1992).

The ESFJs often lean toward careers that serve humanity: nursing, public school teaching, clergy, and psychology (Kroeger & Thuesen, 1988). They are more comfortable in harmonious interpersonal situations and are often fearful of expressing their own opinions. They need a friendly work atmosphere.

ESFJs are matter-of-fact, conventional, and interested in possessions such as beautiful homes and all the tangible adornments of living. They want to know the details, and facts of everyones' experiences. They tend to lack adequate perception and tend to jump to conclusions, often acting on assumptions that turn out to be wrong. They will often ignore their own problems or facts thereby failing to adequately solve certain dilemmas (Myers, 1992).

The ESFJs are remarkably able to see value in other people's opinions. They enjoy communicating and think best when exchanging ideas. Their thoughts take shape when vocalized (Van der Hoop, 1939).

The ISTJ is more driven by a sense of responsibility than any other type. It is easy to see how the majority of the people in the military fit into this category. These people have acquired social grace, ease with words, and all of the appropriate interpersonal skills demanded at any given moment. They can be outgoing at times and mistaken for extroverts. But the ISTJ is definitely introverted and they are the most private of the sixteen types (Kroeger & Thuesen, 1988).

They focus inwardly, and concentrate on data in an objective, immediate, and concrete way. Their conclusions are translated impartially and tangibly. Their ability to organize and schedule

comes easily and naturally.   They are extremely demanding at home and work as well as at play. To some observers, the ISTJs are the typical type 'A' personalities-very driven, impatient, and obsessive.

ISTJs often excel at school and work. They hold high offices as class presidents, or community leaders. They do their duty.   ISTJ females have driven personalities and although admirable, this contradicts the traditional "feminine" traits. These females are inwardly conflicted about trying to balance the conventional feminine duties with their objective and organized nature (Kroeger & Thuesen, 1988).

For the ISTJ, actions speak louder than words. Their expression of love comes from doing and less often saying, which this may cause trouble with loved ones. This nonverbal communication may lead others to see them as uncaring. But they do care and show it through their strong sense of responsibility. They are fiercely loyal to individuals and institutions. In a study of more than 10,000 military members-from enlisted personnel through four-star generals and admirals-the predominant configuration is ISTJ (Kroeger & Thuesen, 1988).

Other professions to which ISTJ gravitate are also oriented toward achieving practical and tangible results. These include such careers as general surgery, law, and accounting. These occupations have appeal because they involve working alone, are results oriented, require objectivity, and there is a general prescribed way of doing the job. Even though they may be successful at any career, ISTJs are less drawn to those that require abstract thinking and interpersonal spontaneity. Whether as supervisors or subordinates, with their work as with everything else they prefer to follow the rule book. They expect those who follow the rules to win and those who do not, to lose (Kroeger & Thuesen, 1988).

Summary

The MBTI is a popular tool used to inventory personality traits. It has been used in higher education to develop curricula for students to aid them in making the right choices for careers and to better adapt to their roles as students. Many studies have been conducted using the MBTI to increase our knowledge of what makes people choose certain career fields over others. Studies have demonstrated that most anesthesiologists fit into the ISTP type, whereas general practitioners fall into the ESTJ section. Nurses are in the SFJ category, and military personnel are found to be in the ISTJ classification.

CHAPTER 3

FRAMEWORK OF THE STUDY

The MBTI tool can be used to separate people into personality types in order to predict if they are better suited to an occupation over another. Many professions have a significant number of people that dominate a certain type classification.

Type theory refers to Carl Gustav Jung's theory of psychological type as interpreted by Isabel Myers and Katharine Briggs and operationalized through the MBTI. Jung observed patterns in the way people perceive and make judgments, and these patterns he called psychological types. His contribution to the understanding of the human psyche is truly of lasting significance. Jung's contributions are practical and useful and the Jungian Institute in Kustnach by the Lake of Zurich is becoming increasingly influential as an organization focused on the application of psychological theory in the healing professions, in family life, and in any type of organizational setting. There are C. G. Jung institutes located in many metropolitan areas in the United States (Isachsen & Berens, 1988).

According to Jung, all conscious mental activity involves four cognitive processes. There are two perceptive functions, sensing and intuition, and two judgment functions, thinking and feeling. Everyone uses all four processes, but individuals differ in their use of skill in each process and function, as well as in the attitude with which they use each process (Jung, 1923).

The MBTI is an instrument designed to identify theoretical constructs of Jung's personality typology. Jung (1926) suggested that much of the random, observable behavior of humans is actually orderly and related to certain basic differences in how individuals approach

life. He believed human behavior was not random but was in fact predictable and classifiable.

The MBTI identifies the differences in which a person will perceive and judge a situation or

event. Composed of 126 questions the survey is based on Jung's theory of personality type.

Jung's ideas broadened the concepts of personality and explained the ways in which people

handle themselves in all kinds of situations, thereby providing some behavioral predictability

and making it possible to render more reasonable judgments of those who do not seem to fit into

one's own mold and comfort zone (Isachsen & Berens, 1988). Jung believed that differences in

behavior are a result of preferences related to the basic functions of our personality. These

preferences emerge early in life, and form the foundation of an individuals personality. Such

preferences become the core of one's attractions to and repulsions from people, tasks, and

events all through life (Kroeger & Thuesen, 1988).

Katharine Briggs, noting the difference in people's behavior, became interested in classifying

them based on those differences. She believed that people differed in their approach to life.

When Jung's work was translated into English, Briggs became an avid student of Jung's

typology. Briggs and her daughter Isabel Briggs Myers, set out to design a tool that would

explain in scientific and reliable terms the differences according to Jung's Theory of Personality

Preferences; hence, the Myers-Briggs Type Indicator was born (Kroeger & Thuesen. 1988).

Personality is one variable that correlates with the occupational specialty and practice type

(Sliwa & Shade-Zeldow, 1994). Nurses are often found to have sensing and judging

personality types (Jain, 1996). In one study, sensing, feeling, and judging personality types were

found to be common characteristics of a sample of nursing students(Hodges, 1988).

The MBTI assesses four dimensions of personality. Each dimension is represented on a bipolar

scale, and individuals are grouped into one of two opposite preferences within each dimension (Sliwa & Shade-Zeldow, 1994). The underlying supposition is that every person has a natural preference for one or the other pole on each of the four indices (Carlyn, 1977).

The four pairs are extroversion and introversion, sensing and intuition, thinking and feeling, and judgment and perception. Although nurses tend to fit in all the eight categories, there are some categories that nurses tend toward. In Jain and Lall's study in 1996, they found that 15 of 34 nurses fell into the sensing, feeling, and judging types (SFJs).

The introverts (I) main interests are in the inner world of concepts and ideas. They concentrate on perception and judgment of ideas. Introverts derive their faculty for concentration from their tendency to pay more attention to their inner thoughts than to what is occurrnig around them (Myers, 1992). Introverts conserve their energy rather than expend it, they prefer the inner world of ideas, they may ponder a situation by withdrawing, pause when in doubt and work towards comprehension. They keep their feelings of happiness, sadness, or excitement inside. Introverts disclose personal information slowly (Costello, 1993). Introverts, who value quiet, are uncomfortable in the presence of more vocal extroverts. Introverts think before speaking. They often understate a point and may appear more aloof and reserved (Kroeger & Thuesen, 1988)

Costello (1993) states that the extroverts (E) enjoy talking, they get charged up by and seek out engagement with other people, enjoy telling others about their experiences, figure things out by talking them through with others, expend energy rather than conserve it, and act out an idea rather than pausing and thinking about it. The extrovert is more involved

with the outer world of people and things, and they have short attention spans (Myers, 1992).

Extroverts may speak more loudly and more rapidly and use more nonverbal communication

than introverts (Kroeger & Thuesen, 1988). Extroversion has been shown to correlate with

impulsiveness (Eysenck & Zuckerman, 1978). "Studies have shown that extroverts exhibit a

great deal more self-confidence than do introverts" (Miller, 1993, p.603).

The means by which we gather information about the world is categorized as a perceptive

function, with two subsets called sensing and intuition. "Sensing (S) refers to perception

through use of the senses. Because the senses respond to what is presently occurring,

individuals with sensing perception tend to focus on the immediate experience, enjoying the

present moment and displaying powers of observation" (Sliwa & Shade-Zeldow, 1994, p. 309).

Sensors tend to take things literally. The sensor will give a detailed description of events, will

work to understand a process by looking at it sequentially, and will be impatient with fancy

schemes (Kroeger & Thuesen, 1988).

"Intuitive types look at things more vaguely, so as to get a certain spontaneous hunch from

the unconscious; they like to deal with abstractions, inferred meanings, and the hidden

possibilities in a situation" (Carlyn, 1977, p. 461). Intuitive (N) types like generating ideas,

looking at things in a very creative way, sometimes missing details. They ask what if

questions, and tend to skip steps rather than going through a process step-by-step. They become

restless with routines and believe in their hunches despite what may be evidence to the contrary

(Costello, 1993). Intuitive types are more likely to give a general reply to a question instead of

the blow-by-blow description that the sensors would give. Intuitive types will randomly gather

information and fit it into a theoretical model. They also are impatient with many details

(Kroeger & Thuesen, 1988).

The thinking and feeling category describes how we process information towards making a decision. "The Thinking and Feeling processes-the means by which we critique, evaluate, and decide about the information we have gathered (through Sensing and Intuition)-is a very personal one" (Kroeger & Thuesen, 1988, p. 70). The thinker (T) prefers rules, laws and standard operating procedures, they put things in a logical kind of order, they are concerned with fairness, they want to be treated justly and are stubborn having once made up their minds. Thinkers prioritize their tasks over relationships, and come across as very businesslike (Costello, 1993). Thinkers seek objective clarity and look at the cause and effect of a decision. "Thinkers are capable of looking at situations objectively, often making statements that may sound a bit uncaring" (Kroeger & Thuesen, 1988, p. 70). Thinkers are the ones who use their head to make the impersonal and tough decisions. Seeming to be aloof and objective, they are impersonal and have specific personal criteria by which they make decisions (Isachsen & Berens, 1988).

Feelers (F) are pleasers. Because they base decisions on their personal values, they consider the effects that a decision may have on other people. Feelers are sympathetic, have concern for harmony, and place relationships over tasks. Wanting to feel needed and valued, they prefer to work among friends (Costello, 1993). Feelers are skilled at understanding others feelings and analyzing subjective impressions based on their own personal values (Carlyn, 1977). "Feeling involves coming to conclusions on the basis of relative values" (Freund, 1988, p. 6). Feelers make decisions from the heart because they are personal, understanding, and compassionate. According to Isachsen & Berens (1988), as humane and subjective people, they take into

account circumstances when rendering decisions.

The Perceiving and Judging category describes our preferences for the way we live. All conscious mental activity involves perception and judgment. Judgers (J) are people who seek organization and closure. Judgers need to regulate and control situations and events (Myers, 1992). "Those who prefer a judging attitude tend to shut off perception in the belief that seeking further information is irrelevant" (Miller, 1995, p. 310) Being more focused on a task or topic, judgers have a built-in clock and tend to offer decisive opinions on most topics. When faced with a problem, Judgers will plan, organize, meet deadlines, and make each moment meaningful (Kroeger & Thuesen, 1988).

Perceivers (P) tend to postpone decisions until as much information is obtained as possible. "They are less oriented toward closure and more toward accumulation of information to make a decision" (Sliwa & Shade-Zeldow, 1994, p. 309). Perceivers are spontaneous, flexible and aim to understand life and adapt to it. According to Myers (1992), the perceivers attitude is to delay judgment, and await any new developments because to make a decision too soon would be to do something irrevocable. Perceivers are spontaneous and flexible and like to keep the schedule open just in case (Schoessler, 1993). Perceivers move more readily from one subject to another, sometimes to the point of seeming scatter-brained. They are less likely to offer decisive opinions and prefer to answer a question with another question. Perceivers can generate alternatives to any situation. Perceivers will find out how much time they are allotted for a project, play, brainstorm possibilities and solutions, check out any limitations, have fun, get coffee, and relish the time spent in choosing the right decision (Kroeger & Thuesen, 1988).

The founding father of the theory of personality type was Carl Jung, the Swiss psychologist.

The theoretical framework was later added by Myers-Briggs . The MBTI is probably the simplest and most reliable method of determining a person's Jungian type. It has been used extensively and many of the insights into the role of personality and human behavior have been developed from using the Indicator (Myers, 1992).

"To determine the person's personality type, the points for each preference are totalled, yielding eight numerical scores. These eight scores are interpreted as four pairs of scores, with the larger of each pair indicating the preferred pole. The final result is that a person is classified as one of 16 possible types: ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ, or ENTJ" (Carlyn, 1977, p. 462).

"When people tentatively choose an occupation, they should carefully consider how much use the job would make of their own preferred kind of perception and kind of judgment; prospective workers in any field should find out all they can about what they will be doing and how much time will be spent on each kind of work. Although no job is perfect, it is easier to accept the imperfections cheerfully if the job gives workers the opportunity to use their preferred processes" (Myers, 1992, p. 158).

Studies have demonstrated that anesthesiologists have a strong predisposition for the ISTP and ISFP groups (Myers, 1992). It was postulated that the anesthesiologists acute -S-P watchfulness is reinforced by the introvert's capacity to concentrate for a long time, and according to Myers, "Anesthesiology does not appeal to the other S-P types, ESTP and ESFP, perhaps because their extroversion tends to shorten their attention span" (p. 170). Since nurse anesthetists have similar training and clinical activities as anesthesiologists, this nursing specialty group may have the same personality traits as the anesthesiologists, which is ISTP.

Family nurse practitioners do many of the same tasks as a general practitioner. In one study a large proportion of general practice physicians were in the ESTJ group. One would normally think that a family doctor would be warm-hearted and feeling instead of a hard-hearted ESTJ type. However, studies have demonstrated that general practitioners fall into this category with a high frequency. Myers (1992) postulated that the prevalence of the hard-hearted ESTJs in general practice might come less from enthusiasm for that field, than from impatience to earn money--without the delay of up to five years of residency. The second largest grouping for general practice physicians was the ISFP group which would concur with the perception of the family doctor as being intuitive, thoughtful, and sensitive. Generally nurses fall into the SFJ group which is caring, warm-hearted, and feeling (Hodges, 1988). It will be interesting to see which groups the family nurse practitioners favor using the MBTI.

Having a background as a registered nurse and a Master of Arts degree in Human Resource Development led me to this area of personality characteristics in the professions people choose. I am interested in why people choose their fields of specialty. A graduate nurse entering a nurse anesthetist program or a family nurse practitioner program is already the product of a professional socialization process operational in the nursing educational system. Values, attitudes, and norms learned in nursing academia may not coincide with those attributes considered to be desirable as a Certified Registered Nurse Anesthetist (CRNA) or as a Family Nurse Practitioner (FNP). Nurses are more feeling (F), and the anesthesiologists are found more in the thinking (T) categories.

Currently, admission committees in graduate programs look at grades, references, Graduate Records Examination (GRE) scores and competencies, but do not use noncognitive tools in

choosing candidates for entry into their programs. It is important for program evaluation and improvement to investigate the trait characteristics present in practitioners and student groups as stability and longevity in the profession may be influenced by the degree of presence of these qualities in the individual (Reeve, 1980).

Students whose personalities are similar to those of the faculty and practitioners have an easier and more complete socialization into the field (Cohen, 1981). Rovinski (1990) believed it equally important to focus on which characteristics faculty members perceive as important for first year nurse anesthesia students to possess, because faculty perceptions can influence the dynamics of the faculty-student interaction unit, particularly in the clinical education area.

Individual differences have long been recognized in the American tradition and are the cornerstone of individuality and autonomy. Higher education is based on the premise that students with various motivations can be served by different institutions to reach their individual aspirations. Perhaps more so than other parts of our society, higher education is dedicated to ensuring the fulfillment of the human potential through the recognition of each person's uniqueness. Psychological type theory, as given to us by Jung and further expounded on by Myers-Briggs, provides a way of examining some important personality differences (Lynch, 1985).

Summary

Personality traits play and important role in socialization. High achievers such as nurse anesthetists and family nurse practitioners have proven themselves as scholastically capable of

succeeding at graduate level work, but what about their noncognitive preferences? What makes a nurse choose one advanced degree over another? Nurse anesthetists and family nurse practitioners have increasing demands due to the human nature of their professions. A wrong decision can lead to life-threatening outcomes. A better understanding of one's personality attributes can be useful by making one's views about one's and others more realistic. Interpersonal conflicts might be dealt with more successfully if approached in the light of Carl Jungs' theory of psychological types. Recognizing there are many personality differences encountered in the workplace can help us all to realize our human potential. With the combined efforts of Jung, Myers and Briggs, the MBTI was formulated. Today this psychometric questionnaire is probably the simplest and most widely used reliable method for determining a person's Jungian type.

CHAPTER 4

METHODOLOGY

<u>Research Design and Procedures</u>

This was a descriptive study. The sample involved only uniformed services nurses who were selected for the Uniformed Service University of the Health Sciences (USUHS) nurse anesthetist or family nurse practitioner programs. The MBTI was administered during their initial orientation session. For the SRNAs this meeting occurred in June of 1997, and for the SFNP's it occurred on August of 1997. The inventory had 126 questions, and took 30 to 45 minutes to complete.

<u>Sampling</u>

The sample consisted of baccalaureate prepared registered nurses in the uniformed services of the United States. There were 25 SRNAs and 13 SFNPs, which is the total number of beginning students in these programs. The principal investigator asked each to participate in the study during orientation week.

<u>Instrumentation</u>

The instrument used was the MBTI. The data were kept confidential as names were not to be placed on the inventory. Instead, numbers were placed on the questionnaires. By remembering their code number students were able, if they so desired, to obtain their results on the MBTI. The investigator did not know the student codes. It was not known which collegiate completed which inventory, so students were assured of anonymity. The instrument was sent to the Institute for Management Development Inc. for interpretation and analysis.

Protection of Human Rights

An informed consent (appendix A) was obtained asking subjects to participate in this study and assuring them of anonymity. No cost was accrued by the student, and they could benefit in knowing their own personality type.

Data Analysis

Analysis between groups and literature reports of anesthesiologists, general practitioners, nurses, and military groups that have used the MBTI will be presented. The SRNA and SFNP MBTI were also compared for similarities and differences.

CHAPTER 5

ANALYSIS OF THE DATA

Below are the composite results of the MBTI for student registered nurse anesthetists (Table

2), and the student family nurse practitioners (Table 3).

Table 2.

Composite Results of Student Nurse Anesthetists (N=24)

ISTJ N=8 33%	ISFJ N=3 12.5%	INFJ N=0 0%	INTJ N=0 0%
ISTP N=0 0%	ISFP N=0 0%	INFP N=0 0%	INTP N=1 4%
ESTP N=0 0%	ESFP N=2 8.3%	ENFP N=0 0%	ENTP N=1 4%
ESTJ N=3 12.5%	ESFJ N=3 12.5%	ENFJ N=1 4%	ENTJ N=2 8.3%

LEGEND: I=Introvert, E=Extrovert, S=Sensing, N=Intuition, T=Thinking,
F=feeling J=Judging, and P=Perceiving. Shaded areas depict students
composite results.

Table 3.
Composite Results of Student Family Nurse Practitioners (N=13)

ISTJ N=2 15.3%	ISFJ N=1 7.6%	INFJ N=0 0%	INTJ N=1 7.6%
ISTP N=0 0%	ISFP N=0 0%	INFP N=0 0%	INTP N=0 0%
ESTP N=0 0%	ESFP N=0 0%	ENFP N=0 0%	ENTP N=1 7.6%
ESTJ N=4 30.7%	ESFJ N=2 15.3%	ENFJ N=1 7.6%	ENTJ N=1 7.6%

LEGEND: I=Introvert, E=Extrovert, S=Sensing, N=Intuition, T=Thinking, F=Feeling, J=Judging, and P=Perceiving. Shaded areas depict students composite results.

Twenty-five inventories were distributed to the SRNAs and 24 (96%) were returned.

Thirteen inventories were given to the SFNPs and all 13 (100%) were returned. The analysis

of the MBTI was completed by the Institute for Management Development Incorporated in San

Juan Capistrano, California. The analyses of each students personality type were placed in

individual folders and returned to the subjects upon request.

Because nurse anesthetists' work is similar to that of anesthesiologists, we compared the

composite results of SRNAs with those reported in the literature of anesthesiologists.

Anesthesiologists personality types fit into the composite category of introverted-sensing-

thinking-perceiving or ISTP (Myers, 1992). The results of the MBTI (Table 2) for SRNAs show

that of the 24 SRNAs *none* fell into the ISTP category. In fact, 33% fell into the ISTJ

(introvert-sensing-thinking-judging) group, 12.5% fell into ESFJ (extrovert-sensing-feeling-

judging), and 12.5% fell into the ISFJ (introvert-sensing-feeling-judging) group. The ISTJs are

the composite category most military score high on and the ESFJ and ISFJs are those that the

nurses most often score high on. Since the inventory was given to 24 military nurses, it was not

surprising that 33% fell into the military category (the ISTJs), and 25% in the nursing group

(the E/ISFJs)

Table 4.

Student Registered Nurse Anesthetists discrete item categories (N=24)

Type	Numbers	Percentage
Introvert	12	50
Extrovert	12	50
Sensing	19	79
iNtuition	5	21
Thinking	15	62
Feeling	9	37
Judging	20	83
Perceiving	4	17

When comparing discrete items (Table 4), 50% of SRNAs scored I-introvert which is similar to anesthesiologists; the majority, 79%, of the SRNAs were sensing (S), also similar to anesthesiologists; the SRNAs are 62.5% thinkers (T), also like the anesthesiologists. However, an overwhelming 83% of the sampled SRNAs scored high as Judgers which is *not* like the anesthesiologists who are reportedly perceivers (P). Therefore, a major difference between the anesthesiologist scores reported in the literature and the SRNAs scores reported here is in the fourth category; the J (judging) versus the P (perceiving) category. Following is a discussion of the differences between judgers and perceivers.

The choice between the perceptive attitude and the judging attitude as a way of life is how we deal with the world around us. Although people, of course, use both perception and judgment, both cannot be used at the same moment. There is a time to perceive and a time to judge, and there are many times when either attitude could be appropriate. Most people find one attitude more comfortable than the other; feel more at home in it, and use it as often as possible in dealing with the outer world (Myers, 1992). For example, some readers of this page are still following this discussion with an open mind and they are, at least for the moment, using their sense of perception. Others, using judgment, have already decided whether they agree or disagree.

Judgers (J)(the category SRNAs score high on) are always waiting for others who never seem to be on time. They have a place for everything and are not satisfied until everything is in its place. Judgers "know" that if everyone would simply do what they are supposed to do, the world would be a better place. They

wake up in the morning and know fairly well what the day is going to be like; they have a schedule and follow it and can become unraveled if things do not go as planned. They do not like surprises, and make this well known to everyone. They keep lists and use them! If the judger does something that is not on the list, he may even add it to the list just so he can cross it off. They thrive on order and have a special system for keeping things in the refrigerator and dish drainer, hangers in the closets and pictures on the walls. Judgers like to work things through to completion (Kroeger & Thuesen, 1988, p. 24).

Perceivers (P) (the composite category that most anesthesiologists score high) are easily distracted, they can get 'lost' between the front door and the car. They do not plan a task but wait and see what it demands; people accuse them of being disorganized. They depend on last-minute spurts of energy to meet deadlines. Perceivers do not believe that "neatness counts" even though they would prefer to have things in order; what is important is creativity spontaneity, and responsiveness. They turn most work into play; if it cannot be made into fun, it probably is not worth doing. They change the subject often in conversations, and the new topic can be anything that enters their mind or walks into the room. They do not like to be pinned down about most things; they would rather keep their options open. Perceivers tend to usually make things less than definite from time to time, but not always-it all depends (Kroeger & Thuesen, 1988, p. 24).

It is interesting to note that the judgers are more organized, scheduled, and keep everything in good order. They tend to be more cautious. This is the classification the SRNAs fell into. Whereas the perceivers, the classification of anesthesiologists are in (Myers, 1992) are more spontaneous, playful, and are not prone to neatness or everything in its place.

It is interesting to note that it can be problematic when co-workers differ on both perception and judgment.

> Working together will teach them something valuable if they respect each other,
> but it can be disastrous if they do not. As a team, they have at their disposal skill
> in both kinds of perception and both kinds of perception and both kinds of
> judgment. They need to understand each other well enough to see the merit of
> the other's skills and to use them (Myers, 1992, p. 208).

Comparing general practitioner (GPs) physicians and student family nurse practitioners (SFNPs) is also interesting. Myers postulates that more research is needed in the area of the general practitioners today. The second largest grouping for the GP is ISFP, which concurs with the perception of the family doctor as being intuitive, thoughtful, and sensitive. Recently, however, GPs are scoring high in the ESTJ composite category. The reason that GPs are believed to fall into the ESTJ is that they are eager to start earning without the delay of as much as five years of residency. It is believed that the high financial rewards of medicine for the professional physician took precedence over the scientific and humanitarian aspects of the work itself (Myers, 1992). This may not the case for the SFNP who wants to gain more schooling and knowledge despite the lucrative position already held as a nurse. Remember that ESTJs, the

category GPs fall into most often, are life's administrators. They have a driving need to impose

their judgments on the world around them with structure, schedule and order.

The SFNPs had an N of just 13 students; four (31%) of whom fell into the ESTJ category,

15.3% fell into the ISTJ or military group and 23% fell into the nursing groups of E/ISFJs.

Again, at this inventory was given to military nurses, it is not surprising that the majority of this

group (38%) fell into either the military or nurse prototype.

When analyzing each individual category (Table 5), the overall majority of SFNPs fall into

the composite category of ESTJs. Again it is hard to compare this with the GPs who fall into

this same category (Myers, 1992). One reason for the inability to compare is because the GPs

attend *less* school for their position as opposed to other specialties in the medical arena, and

FNPs attend *more* school than usual for nurses. A larger number would be advantageous to

delineate the FNPs typology.

Table 5.

Student Family Nurse Practitioners Discrete Item Categories (N=13)

Type	Numbers	Percentage
Introvert	4	31
Extrovert	9	69
Sensing	9	69
iNtuition	4	31
Thinking	9	69
Feeling	4	31
Judging	12	92
Perceiving	1	8

Summary

Given the small sample size of this project, one can only speculate as to why nurses fell into many categories other than those of their medical counterparts. It is noteworthy, however, that similar characteristics were found in both groups of graduate nurses. This point will be expanded in the next chapter.

CHAPTER 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Although nurses have diverse backgrounds, they typically fall into the MBTI typology of either a E or I/SFJ. The question arises as to what the personality types are of nurses who self select into anesthesia or nurse practitioner graduate study. None of the nurse anesthesia students fell into the anesthesiologists category, although 30.7% of the SFNPs fell into their counterpart general practitioner group.

The majority of the SRNAs type fell into the ISTJ composite category which is similar to the anesthesiologists group (ISTP) with one notable difference-- in the fourth category of the J versus the P.

The ISTJs (the category into which the majority of the future nurse anesthetists or SRNAs fell) personality description is that of a systematic, and painstakingly thorough employee. They carry responsibility especially well and are very hard working and the most practical of the introvert types. They make an excellent adaptation to routine and absorb and enjoy using an immense number of facts. The ISTJs emphasize logic, analysis and decisiveness. Myers says that all contracts should be cleared by the ISTJs because they do not overlook anything and do not take anything for granted. The ISTJs will catch the many slips and oversights of others (Myers, 1992). The ideal work environment is a stable and orderly one in which tasks are defined and everyone knows what is to be done, who is to do it and by what completion date.

The ISTPs (the category of most anesthesiologists) personality description is one of organizing concepts and facts, but not people or situations unless necessary. They are outwardly

quiet, reserved, detached, and perhaps even aloof except with intimates. They are inwardly absorbed in the current analysis or problem. Relying on thinking makes them logical, impersonal, and objectively critical, and not likely to be convinced by anything except reasoning. They are detachedly curious and quite adaptable (Myers, 1992). The ideal work environment for the ISTP is one in which there are specific and concrete problems to solve and is an absence of routine and required procedures. Without an occasional crisis ISTPs may lose interest. At times people view ISTPs as uncaring and insensitive. It is important to remember that ISTPs focus more on task completion than on individuals doing the work. ISTPs have an insatiable hunger for excitement that at times may lead them to the brink of disaster. The reason is simple: they pride themselves on being able to trust their impulses and rise to the occasion, thus avoiding adversity, malfunctioning and even disaster. Their energy is directed toward taking expedient action and shortcuts and finding quick fixes. They do not waste personal energy on others. They tend to be autonomous, wanting to be in control of on their own actions. ISTPs may focus so much on keeping things moving and on fast action that they may ignore the human element-people needs. (Isachsen & Berens, 1988).

The majority of the SFNPs type fell into the ESTJ composite category, which also holds true for the GPs. The majority of GPs are interested in obtaining financial gains sooner than their counterpart physicians who elect to continue in residency programs for years later. On the other hand, the nurses who opt to enter graduate school, go to school longer than their nursing counterparts, to achieve possibly a higher social status, more challenge, or, like their doctor counterparts, more financial gains. The small sample size, again, limits analysis of the data.

The ESTJs (the SFNPs category) description of their personality types is one of being

predictable, stable and orderly. They are result-oriented, cooperative, authoritarian and quite decisive. The ESTJs want to be accountable and responsible. They are known to be diligent, focused, and energetic workers. Indeed, they tend to demand more from themselves than anyone else. They are comfortable with proven authority and are likely to put faith and trust in credentials, hierarchies and systems that have served organizational purposes well. Belonging, camaraderie, and being an integral part of the whole group is important to ESTJs. They are quick to determine what needs to be done and then do it-they are take charge individuals (Isachsen & Berens, 1988).

Conclusion

When evaluating the discrete composite groups of the SRNAs and SFNPs together (Table 5), both groups were very similar, the majority of subjects being ESTJ composite prototype. The ESTJ is similar to the ISTJ group of anesthetists, varying on only one category: the I-introvert verses the E-extrovert group. Both graduate student practitioner groups were similar as well as being similar to their physician counterparts with the one notable difference-- SRNAs are the judging type (J) versus the anesthesiologists perceiving (P) type.

Each of these preferences is a fork in the road of human development and determines which of two contrasting forms of excellence a person will pursue. How much excellence people actually achieve depends in part on their energy and aspirations, but also according to type theory, the kind of excellence toward which they are headed is determined by inborn preferences that direct them at each fork in the road (Kroeger & Thuesen, 1988). The fact that these nurses generally fell into the nursing and military types adds to the validity of the instrument.

Table 6.

Discrete category for SRNA's and SFNP's combined

Type	Numbers	Percentage
Introvert	16	43
Extrovert	21	57
Sensing	28	76
iNtuition	9	24
Thinking	24	65
Feeling	13	35
Judging	32	86
Perceiving	5	14

Recommendations

A broader study involving new SRNAs and SFNPs students, with a larger sample size, would be helpful. Representation from SRNAs and SFNPs at civilian schools would also prove insightful. The author recommends a longitudinal study of individuals from time of application and selection to a nurse anesthesia and nurse practitioner educational programs, through their education and several years of practice be undertaken to determine stability or change of characteristics and when they occur. Although one may have a predisposition to certain personality traits, years of enculturation in a profession might alter any one of their typology categories (Sliwa & Shade-Zeldow, 1994). Administering the MBTI to veteran CRNAs and FNPs would also be useful. Because no large data collection has been conducted

on either CRNAs or FNPs, their type has not been established. A larger sample size may lead to more conclusive analysis between the typology and ones chosen profession.

Since this is an initial investigation into this area, further study is needed to confirm the findings. Generalization of the results beyond the participants in this study should be done with caution as this is a descriptive study with a small sample size. However, the profiles established can serve as a comparative basis for future research.

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Appendix A

Budget

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