A COMPARATIVE ANALYSIS OF THE CHARACTERISTICS OF MALES AND FEMALES WHO SELECT NURSING AS A PROFESSION

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by
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A COMPARATIVE ANALYSIS OF THE CHARACTERISTICS OF MALES AND FEMALES WHO SELECT NURSING AS A PROFESSION

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ABSTRACT

The purpose of this study was to examine if there were any changes over the last 33 years in factors that influence career choices of males and females who become registered nurses. A structured self-report survey including 33 fixed alternative and short response questions, patterned from studies by Mannino (1963) and Williams (1973), was developed by the researcher and mailed to 150 male and 150 female registered nurse in Iowa. Data examining background characteristics and demographic information were collected from a sample of 63 male and 84 female registered nurses in Iowa.

Four research questions were developed to help determine the factors that influence males and females to choose nursing as a career, specifically those factors that were similar and different between male and female nurses. The data were utilized to determine implications for the marketing and recruitment of men into the nursing profession. The theoretical framework of the study was social role theory.

The respondents were primarily caucasian, Catholic, married with children, and averaged an age of 41.8 years. They had been in nursing 14.2 years and their most recent nursing position was staff nurse.

An analysis of the data revealed the factors that influence males and females to choose nursing as a career to be similar. Ranked factors influencing the choice of nursing as a profession by both male and female subjects included "to help people". The male nurse was single, was older when he decided to become a nurse and when he entered a nursing education program. He aspired to obtain a management position in nursing, and had relatives in nursing. He had an associate degree in nursing, had been in the armed forces, had a college degree other than nursing and a career prior to nursing.

Findings of this study reveal that the male nurse of today had changed little from the male nurse in the studies of Mannino (1963) and Williams (1973) and is similar to the female nurse of today. Suggestions to increase recruitment and marketing of men in nursing included presenting nursing to males as appealing, introducing non-traditional career choice possibilities to males early, and actively targeting young males through the media. Marketing should be done in an androgynous manner, recruitment should be aimed at men in allied health professions, male role models such as male nurse recruiters or nursing faculty should visit with potential male nursing students, and school counselors need to be informed about the potential of a career in nursing. The advanced practice nurse needs to continue to conduct research on men in nursing to identify more factors for marketing and recruitment.
I wish to express my sincere thanks to the following persons:

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CHAPTER ONE

INTRODUCTION

Overview of the Problem

Nursing began as a profession of men. Throughout the years, historical influences such as the Industrial Revolution that required men for heavy industry, and World War I, that barred men from serving their country as nurses because of the Army Nurse Corps for women, caused men to leave the nursing profession. Because men could not serve in the Nurse Corps, there was a near depletion of men entering the nursing profession during World War II. Male nurses who had been drafted were assigned to activities that had no relation to health care (Christman, 1988). This loss of males from nursing and the women’s movement of the 1970s, causing women to leave female-dominated professions for previously male-dominated professions, have left the potential for severe nursing shortages in the future.

For many years, nursing has been a profession dominated by females. Although the number of male nursing graduates has shown a steady increase each year in recent years, from 8.4% in 1991 to 11.4% in 1994 (National League for Nursing (NLN), 1995), the total number of males compared to females in nursing still remains small. This has occurred despite the fact that other previously female dominated professions, such as secondary education,
have shown a significant increase in the number of males (Aldag, 1970). A question arises as to what factors contribute to men entering some previously female professions and not others.

Mannino (1963) and Williams (1973) examined the characteristics of male nurses and the reasons they chose nursing as a career. At the time of Mannino's study, men comprised only 1% of the total registered nurse population. He cited as a comparison that women then were about 6.5% of the nation's physicians. Mannino (1963) concluded that compared to nurses in general, male nurses had spent about the same number of years in nursing, were older, had a higher salary, and supported nursing to a greater extent than did nurses in general. He also concluded that nursing as a career is a second choice for males because the majority had another occupation prior to entering nursing, and that once a man enters the profession as a graduate nurse, he is likely to remain in nursing or some related health field. Williams (1973) conducted a study of the characteristics of male baccalaureate nursing students. He proposed that in order to meet changing health care needs and demands of the future, more men should be recruited into nursing.

Very little research has been conducted in the 1980s and 1990s on male graduate nurses. Alvarez (1984) pointed out that after 20 years of research on male nursing students' attitudes, characteristics, and success in nursing, "male
registered nurses [remain] one of the least studied and least understood groups in nursing..." (p. 166). Christman (1988) also found the studies of men in nursing to be few in number. He believed the data were meager and may not represent reality. Villeneuve (1994) encouraged that studies be done in the area of men's preferences for certain fields of nursing.

It seems apparent that research is needed to examine the reasons that males and females choose nursing as a profession. It may be necessary to recruit more men into the profession as the occupational market for women becomes more competitive. It will be useful to have more comprehensive data to plan this recruitment. "Perhaps nurses may be able to demonstrate to the other professions that competency and other desirable characteristics are not sex-linked and, thus, contribute to the full democratization of all professions" (Christman, 1988, p. 204).

Statement of Purpose

The purpose of this study was to examine if there had been any changes over the last 33 years in factors that influence career choices of males and females who become registered nurses. Specifically this study compared the background and demographic characteristics of male and female registered nurses in the state of Iowa. The study was patterned after the studies by Mannino (1963) and Williams (1973). Changes in the sample size, population
selection (including females), and data collection tool were made.

Research Questions

The research questions for this study were:

1. What factors influence males and females to choose nursing as a career?
2. What influence do demographic and background characteristics have in influencing males and females to choose nursing as a career?
3. What differences or similarities exist between those factors that influence males to choose nursing as a career and those that influence females to choose nursing as a career?
4. What implications do these factors have for the marketing and recruitment of men into the nursing profession?

Definitions of Terms

For the purpose of this study, terms were defined as follows:

Nurses--Nurses were defined as males and females who are registered nurses currently registered in the state of Iowa and who have graduated from a diploma, associate degree, baccalaureate, or graduate program of nursing in the United States.

Career in nursing--A career in nursing was defined as the occupation of a
registered nurse in a field of nursing at some time during their lives.

Demographic and background characteristics--Demographic and background characteristics were defined as self-reported data obtained from a questionnaire developed by the researcher consisting of 33 open-ended and fixed alternative questions (Appendix A).

Recruitment and marketing--Recruitment and marketing were defined as strategies used to find and attract new members into the profession of nursing.

Career choice--Career choice was defined as a person's option of selecting an occupation that is preferable to his or her needs.

Overview of Theoretical Framework

The theoretical framework that guided this study was social role theory. According to social role theory, the processes of socialization and personality development occur through a person's participation in increasingly diverse and complex social roles. All cultures have new roles that await individuals as they move from one stage of life to another. The individual must be able to integrate diverse roles in order to maintain a sense of personal continuity. Major life roles include kinship, sex, and occupational roles (Newman & Newman, 1979). With each new role the individual's self-definition changes and the potential for influencing the world increases.

The choice of a career is the result of personal experimentation,
introspection, self-evaluation, fact finding, and intuition. It is very important that persons take their own personality characteristics into account when selecting a career, including what they like to do, what they are interested in, what they are good at, their preference for work associates, their need for approval, their ability to delay gratification, and their personal value orientation (Newman & Newman, 1979).

Initial Overview of the Literature

In 1960, 1% of all registered nurses were men (Mannino, 1963). By the mid 1960s, only approximately 15% of nursing schools accepted male applicants. Even into the 1980s, some nursing schools refused to admit qualified male applicants. In 1990, 8.3% of American baccalaureate nursing programs still had no males enrolled (Villeneuve, 1994).

In 1963, Mannino performed a normative-survey using two questionnaires to obtain data related to why men chose nursing as a career and characteristics of the male nurse. Responses were obtained from 480 graduate male nurses and 36 male nursing students from 33 different states. Mannino found that the men wanted to be nurses primarily because they liked people and enjoyed helping them. The subjects also believed that nursing was a secure job. Other reasons men identified that they wanted to be nurses included the financial inability to enter medical school and that nursing provided a stepping
stone into other fields such as hospital administration or clinic management. Seventy-three percent of the men had education beyond the basic nursing program and 80.2% of the men remained in nursing or related fields (Mannino, 1963).

Williams (1973) studied characteristics of 273 male baccalaureate nursing students from 32 college and university programs in the Western United States. Data were collected by means of a mailed questionnaire. Among other characteristics, the researcher found the majority of men preferred such nursing specialties as surgery, intensive and critical care, and nursing education. Nearly one-third of the men preferred the general health field to nursing.

In 1984, men constituted 3% of the nursing profession. Davis-Martin (1984) found that "literature on men in nursing remains of small quantity" (p. 162). Through a literature review, she hypothesized that perhaps males will assist in bringing increased commitment and new personality characteristics into nursing. She believed that "it would be interesting to replicate some of the studies in [her] review" because "perhaps the male nurse himself will undergo some personality changes, ...especially in the last 30 years" (p. 164).

After over 20 years of affirmative action and dramatic changes in the gender composition of most professions, men constituted 3.3% of the nursing
profession in 1988 (Christman, 1988). Christman (1988) conducted a literature search and found that studies of men in nursing had been approached in three general ways: (a) survey research, (b) focused interview, and (c) use of standardized test batteries to assess personality, intelligence, and attitudes. He also found the studies of men in nursing to be few in number. He identified that this may be due to the few men, especially who are researchers, in nursing. He believed the data were meager and may not represent reality. "Sample sizes need to be larger...and the samples should be composed of enough diversity to make them representative of the populations being studied" (p. 203).

In 1992, male nurses comprised 3% of all registered nurses (Cyr, 1992). Cyr (1992) conducted a small (n = 25) informal survey on male nurses in Massachusetts and Texas to determine if recent changes in nursing had changed male nurses' attitudes or perceptions of the nursing profession. When asked about negative aspects of nursing, the most prevalent responses were the general perception that nursing is a female profession and the lack of camaraderie. The most significant finding was that after 25 years, male nurses seemed to have changed their perception of nursing from that of a "job" to that of a "professional career."

Villeneuve (1994) conducted a computerized search of literature
published primarily since 1980 regarding the recruitment and retention of men in nursing. He concluded that nursing was undervalued and that most potential male candidates lack exposure to male nurses and nursing in general.

Significance for Advanced Nursing Practice

In the past thirty years, nursing has experienced a recurring theme of gluts and shortages. Although nursing is in a glut right now, another shortage is predicted by the turn of the century. The aging of the baby-boomer population along with women going into previously male-dominated professions is decreasing the number of females to fill potential nursing positions. These positions could conceivably be filled by males, but the percentage of males in nursing has only shown a small increase during this period.

Both males and females choose their careers based on what they like to do, what they are interested in, what they are good at, and other criteria based on increasingly diverse and complex social roles. The decision to enter a career that is not generally elected by one’s own sex leads to consistent tension because of the challenges one must face as a result of choice. In the long run, it is expected that the presence of both sexes in every career would alter the nature of the career sufficiently so that its sex-role connotations are minimized. This will lead to an increasing independence between sex role and occupational
role. A society that is able to achieve the independence of these two roles will be able to make use of its pool of human resources (Newman & Newman, 1979).

Although studies have been done in the past, recent studies examining the demographic and background characteristics of males who are currently registered nurses are lacking. Comparison studies examining males and females with regard to these variables also have been few. Through investigation, factors that have influenced both males and females to select nursing as an occupation should become apparent. As the job market continues to change and women continue to leave female-dominated professions for previously male-dominated professions, the potential for severe nursing shortages exists in the future. The male nurse will help fill this gap. Identifying those factors that are crucial to the career decision of male nurses is imperative in order for nursing schools to implement effective strategies for marketing and recruitment of males into nursing. Only then might a new supply of nurses be tapped as nursing moves into the twenty-first century.
CHAPTER TWO
REVIEW OF THE LITERATURE

A review of the literature relevant to the investigation of factors that influence career choices of males and females who become registered nurses is presented in this chapter. The chapter is divided into three major sections. The first section presents the theoretical basis for the study. In the second section, an historical overview of men in nursing is presented. An overall review of the literature is presented in the third section. The chapter concludes with a brief summary of the literature review.

Theoretical Framework

Role is a key concept in sociological theory. "It highlights the social expectations attached to particular statuses or social positions and analyzes the workings of such expectations" (Marshall, 1994, p. 452).

Role theory concerns the tendency of human behaviors to form characteristic patterns that may be predicted if one knows the social context in which those behaviors appear. It explains those behavior patterns (or roles) by assuming that persons within a context appear as members of recognized social identities (or positions) and that they and others hold ideas (expectations) about behaviors in the setting" (Borgatta & Borgatta, 1992, p.
The focus of role theory has become confused due to conflicting use of role terms. Different versions of the theory have been written by authors who seem to be unaware that alternative versions of the theory exist. It has also been weakened by association with controversial theories in sociology (Borgatta & Borgatta, 1992). Role theory was particularly popular in the mid-twentieth century, but after incurring sustained criticism, it came to be viewed as flawed, and substantially fell out of use. The concept of role, however, remains a basic tool for sociological understanding (Marshall, 1994).

Role theory was initiated when social scientists found that social life could be compared with the theater, in which actors play assigned "roles." In the early 1930s, major contributors to the theory considered this concept independently, with somewhat different agendas. Consequently, various traditions of role theory have since appeared. Nevertheless, role theory presumes a thoughtful, phenomenally aware participant, and the role researchers tend to adopt methods that call for observing roles and asking respondents to report about their own or others’ expectations (Borgatta & Borgatta, 1992).

There are several different theoretical approaches that have been used to understand role theory. One early perspective of role theory reflected
functionalism. Functionalist thought arose from the contributions of Talcott Parsons (1937). At one time, functionalist thought was the dominant orientation in American sociology. Functionalist theory is concerned with the problem of explaining social order. Actors within social systems share expectations for behaviors within the system. These expectations constitute norms for conduct and those within the system are thought to be aware of the norms. Functionalist theory has been under attack since the 1950s, and many of the basic assumptions have been challenged. Critics, among other things, have pointed out social systems "are not the static entities that functionalist thought portrayed and that human conduct often responds to power and conflicts of interest in ways that were ignored by functionalists. As a result, interest in functionalist theory has declined..." (Borgatta & Borgatta, 1992, p. 1683).

Interest in organizational role theory began in the 1950s with the works of Neal Gross, Robert Kahn, and their associates. They suggested that rather than consensual norms being required for social stability as with the functionalist view, formal organizations were often characterized by "role conflict," opposing norms that were held for actors by powerful others. The concept of role conflict has proven attractive to scholars who want to study problems that are faced by disempowered persons. Research related to role
conflict within the organization continues actively, and some proponents of the organizational perspective have recently turned their attention to the events of role transition, or phenomena associated with entry into or departure from a role (Borgatta & Borgatta, 1992).

A third theoretical perspective, structural, reflects the early contributions of anthropologists, sociologists, and social psychologists. "The structural account of roles locates a status in society, such as that of a teacher, and then tries to describe the standard bundle of rights and duties associated with an ideal type of this position. These expectations, which are socially based, constitute the role" (Marshall, 1994, p. 453). Much of the work in structural role theory has been expressed in formal mathematical terms and has greater appeal to scholars who are mathematically trained (Borgatta & Borgatta, 1992).

Another theoretical approach to role theory is the cognitive perspective, especially research carried out by cognitive social psychologist Bruce Biddle (1986). This work has focused on role playing, the impact of group norms, the effects of anticipatory role expectations, and role taking. Cognitive social psychologists have studied conformity to many forms of expectations including norms, self-fulfilling prophecies, beliefs about the self, beliefs about others and preferences and attitudes. Cognitive theory tends to ignore expectations for
social positions and concentrates on expectations for individual actors. It also "tends to ignore the implications of its findings for structural analysis and thus appears to be atheoretical from a sociological perspective" (Borgatta & Borgatta, 1992, p. 1684).

The last theoretical approach to role theory is a social psychological perspective that focuses on the active processes involved in making, taking, and playing roles. Symbolic interactionism is focused more on the dynamic aspects of working roles. It examines the interactions in which people play their roles rather than describing the place of these roles in the social structure. The emphasis is on the ways people come to take the role of the other, construct their own roles, anticipate the responses of others to their roles, and finally play at their particular role (Marshall, 1994). Roles need not have common elements, but they are likely to become quite similar among actors who face common problems in similar circumstances (Borgatta & Borgatta, 1992).

The theoretical framework that guided this study was social role theory. According to social role theory, the process of socialization and personality development occurs through a person's participation in increasingly diverse and complex social roles. A role is defined as any set of behaviors that have some socially agreed-upon function and for which there exists an accepted
code of norms. The concept of role highlights the importance of the social context in the developmental process. Most roles exist independently of the individuals who play them. The same expectations influence the way people who perform the role actually behave in the role. Knowledge of the functions and norms associated with any given role will influence the performance of the person in the role and responses of a whole network of people who are associated with the performer (Newman & Newman, 1979).

All cultures have new roles that await individuals as they move from one stage of life to another. Some roles may be accessible only to those who are a certain age or demonstrate other relevant skills, traits, or personal preferences. In some respects the expectations for the role performance remain the same, but in other respects the performance of the role changes. The individual must be able to integrate diverse roles in order to maintain a sense of personal continuity. Major life roles include kinship, sex, and occupational roles. With each new role the individual's self-definition changes and the potential for influencing the world increases (Newman & Newman, 1979).

The choice of a career is the result of personal experimentation, introspection, self-evaluation, fact finding, and intuition. Each job role places the individual in a somewhat different psychological context. Therefore, each job role can be seen as exerting different psychological demands on the
individual. It is very important that persons take their own personality characteristics into account in selecting a career, including what they like to do, what they are interested in, what they are good at, their preference for work associates, their need for approval, their ability to delay gratification, and their personal value orientation (Newman & Newman, 1979).

Brim (1968) discussed the occupational search phase of this period in the following way:

Thus the typical adult during his first years in the labor force experiments with different jobs and passes through his trial work period. People become differentially attracted to occupations on the basis of income, accessibility and the fit of the job to their skills and their personalities, so that an individual's discovery of a compatible occupation is a result of his shifting from one line of work to another until he finds work that he likes.... Often the individual leaves jobs which he does not like until he stumbles across something better. It is during this period that he acquires the knowledge and skills suitable for his more mature occupational choice and enters that phase of his occupational history in which he is likely to continue in the same general line of work for the next thirty years (p. 197).
Newman & Newman (1979) stated that during this occupational search and training, the individual must evaluate the match between personal characteristics and the four central components of the work situation: (1) technical skills, (2) authority relations, (3) unique demands, and (4) the interpersonal relations with peers in the particular occupational role. This fourth area also requires that individuals learn something about the vulnerabilities of people in the jobs that they are trying out. The ways that an individual may be personally vulnerable in a job include: (a) sudden demands for new kinds of job performance; (b) job performance and job permanence highly dependent on the decisions of others; (c) rapid obsolescence of knowledge and/or skills; (d) decreased demand for occupational specialty; (e) likelihood of transfer by the employer; (f) early peaking or upwardly mobile opportunities; (g) lack of preparation for and abruptness of retirement; (h) limited or fixed salary or benefits; (i) hazardous working conditions; and (j) continuous exposure to stress (pp. 366-367). Individuals differ in their vulnerability to these hazards and must decide if the particular vulnerabilities are tolerable in light of compensating awards.

There are a number of different factors that limit the range of occupations open to any particular person during the work search phase. The most obvious include educational attainment, talent and location. Social and
psychological factors may play a part in limiting a person’s aspirations or access to certain kinds of work such as the fact that some occupations are sex-labeled. Females may be more likely to become a nurse and males may seek out administration or management. Through involvement in several work settings, individuals begin to project an image of themselves moving into the future through a particular work role. The work search is limited by the restrictions placed on the kinds of work they consider to be appropriate and by the reactions of the work world to the diversity of potential employees (Newman & Newman, 1979).

Occupational choice is a multidimensional phenomenon that is part of a larger process, including social and psychological factors. Social factors include the decisions a young person must make with regard to what to do after high school. These decisions include choices of entering the full time work force, the military or college. These choices are hypothesized as being important in a sociological view of adult development because each represents a major pathway to adulthood and places different socialization pressures on the young person. Psychological theories center on the development of vocational maturity and occupational personalities.

People maximize their occupational rewards by achieving the closest possible fit between their personality and their work
environment. When a disjuncture between personality and work exists, people are motivated to seek alternative employment. Occupational choices are constrained within a larger system of relations that is outside the individual's control and of which he or she may be only partially aware (Owens, 1992, p. 453).

Furnham (1988) believed that one factor that seemed to be significant in occupational choice is values. Values "are motives that involve normative considerations of 'oughtness' and desirability" (p. 613). These values are shaped from one generation to another by various societal institutions including churches, educational institutions, family, and the media. The person's value system therefore reflects to a large extent their past socialization.

The concept of sex roles, placed within the larger context of role theory, is a subset of the generic concept of role. This subset is linked to the human attribute of gender. Sex roles are of great importance and affect all human ventures (Hardy & Conway, 1988). Sex role conflict may be created by inconsistency between internal values and the external demands imposed by society. When the values of society and those of the person clash, the person must either give up or renegotiate the roles that are found to be dissatisfying. This sex role conflict has been found to affect a number of dysfunctional work
outcomes in the United States. It may be correlated negatively with job satisfaction and involvement, and professional and organizational commitment. It may be correlated positively with absenteeism and turnover (Chusmir & Koberg, 1988).

A central issue in occupational choice is the observed gender differences in career choices. Occupational sex segregation occurs when 70% of the work force in a given job category is one sex, as is the case with nursing. "Special groups selected with respect to occupation or other characteristics, however, do not always conform to the expectations based on the findings for the general population" (Hardy & Conway, 1988, p. 337). It is one of these special groups, men who choose nursing as a career, that needs further study.

Historical Overview

The first educated nurses appeared during the Hippocratic period when most nursing care was performed and supervised by men. During the Middle Ages and Renaissance periods, religious fervor and the Crusades were strong stimuli to the formation of male nursing orders. Men were committed intensely to provide a humane service of quality and concern for the populations they served (Christman, 1988).

During the Industrial Revolution, the demand for male workers for
heavy industry lessened the entry of men into nursing. The militancy of finding careers for women also may have contributed to the de-emphasis of men in the profession during this period (Christman, 1988).

Men have been involved more recently in nursing since 1888 when the Mills School of Nursing for Men at Bellevue Hospital in New York City opened its doors to the first men students. Mr. Mills was convinced that there was a need for the trained male nurse from his personal experiences in the doctorless gold mining camps during the 1849 gold rush and the Civil War (Mannino, 1963).

In 1901, the act of Congress that created the Army Nurse Corps for women automatically barred men from serving their country as nurses. This action lead to a near depletion of men entering nursing during World War I. Because men could not serve in the Nurse Corps of the various armed services, they were not granted educational deferments that made schools reluctant to accept them as students. Despite a nurse shortage in the various services during the war years, male nurses who had been drafted were assigned to activities that had no relation to health care (Christman, 1988).

The situation for men did not change at the outbreak of World War II. Again, men who were nurses found themselves bearing arms and driving earth movers rather than caring for the sick and injured. In 1940, a group of men
petitioned for recognition at the American Nurses' Association (ANA) convention and in 1941, the ANA board of directors created the Men Nurses' Section of the ANA which addressed concerns that gravitated toward the treatment of men nurses in the military and the inadequate salaries for nurses. It existed for 12 years. Equal treatment did not become a reality, but male nurses became involved enough in the mainstream of the professional nursing organization that they did not disappear as they had after World War I. The ANA reorganized in 1952, and the Men Nurses' Section, in support of the reorganization, voted itself out of existence (Halloran, 1990).

After World War II, the rapid growth of the women's movement focused sharply on adjusting sex imbalances in the professions dominated by men.

Compliance with guidelines and policies to remove gender imbalance may have been treated differently in the professions dominated by men than in those dominated by women. The present corrections of sex imbalance percentages are one indicator that enforcement probably has differed. Gender stereotypes prevailed within both groups and in only the male-dominated professions has substantial adjustment taken place" (Christman, 1988, p. 195).

In August, 1955, President Eisenhower signed into law an authorization
for the appointment of men nurses as commissioned officers into the military. This was a turning point for the recognition of men in nursing. The late 1960s and the early 1970s revealed changing attitudes and values in society that directed recruitment efforts toward minority groups, including men and others not previously encouraged in nursing. Little is known about the contributions of these minority groups to professional nursing since that time (Pheifer & Davis, 1987). As occupationally atypical men (Lemkau, 1984), male nurses have attracted scant research attention. Much of the literature is based on anecdotal data or suffers from methodological limitations. Because a number of research studies about men have been conducted by students and staff nurses, the relative importance of the topic to other nursing personnel is perhaps reflected (Villeneuve, 1994).

Review of Relevant Literature

In 1963, Mannino performed a normative-survey using two questionnaires. The first questionnaire obtained data on why men chose nursing as a career. The second questionnaire "was constructed for the purpose of obtaining data that would be useful in shaping the image of the man nurse as he would be characterized by the sample surveyed" (Mannino, 1963, p. 185). A total of 543 questionnaires were sent to male nursing students and male graduate nurses and returns came from 33 different states, Japan,
Germany and Iceland.

Five hundred sixteen responses were received from the first questionnaire, 480 from graduate male nurses and 36 from male nursing students. Mannino (1963) found that the men wanted to become nurses primarily because (a) they liked people and enjoyed helping them (14.04% of the respondents); (b) they wanted to go into medicine, but were financially unable to do so; (c) they desired to improve their status in life; (d) they wanted to enter a field of service in which they could give their greatest contribution to help fulfill the needs of humanity; and (e) they wanted security for themselves and their families (p. 186).

The second questionnaire examined the characteristics of the man in the nursing profession. A summary of the results follows in Table 1.
Table 1

Summary of the Characteristics of Mannino’s (1963) Man in Nursing Study

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>37.11 years</td>
<td>21 to 74 years</td>
</tr>
<tr>
<td>Marital status</td>
<td>70.8% married</td>
<td></td>
</tr>
<tr>
<td>Wives are nurses</td>
<td>73.2%</td>
<td></td>
</tr>
<tr>
<td>Number of children</td>
<td>2.59 per family</td>
<td></td>
</tr>
<tr>
<td>Years in nursing</td>
<td>16.3 years</td>
<td>1 to 43 years</td>
</tr>
<tr>
<td>Salary</td>
<td>$6334.50 per year</td>
<td>$3500-$14,500/year</td>
</tr>
<tr>
<td>Recommend nursing</td>
<td>* 73.6%</td>
<td></td>
</tr>
<tr>
<td>Prof. journal</td>
<td>** 61.4%</td>
<td></td>
</tr>
<tr>
<td>Prof. organization</td>
<td>*** 57.3%</td>
<td></td>
</tr>
<tr>
<td>Nursing relatives</td>
<td>61.3%</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>+ See text</td>
<td></td>
</tr>
<tr>
<td>Armed services</td>
<td>69.3%</td>
<td></td>
</tr>
<tr>
<td>Age began nursing</td>
<td>21.15 years</td>
<td>17 to 36 years</td>
</tr>
<tr>
<td>Prior occupation</td>
<td>61.4% yes</td>
<td></td>
</tr>
<tr>
<td>Parent’s occupation</td>
<td>**** 161 different-</td>
<td>(393 housewives)</td>
</tr>
</tbody>
</table>


Based on "nursing is a good stepping-stone into other fields" (p. 186).

** Journals most frequently mentioned were American Journal of Nursing, Nursing Outlook, Nursing Research, and Modern Hospitals.

*** Organizations mentioned most often were the American Nurses' Association, the National League for Nursing, and the State Nurses' organizations.

**** Most common occupations for the fathers were farming and coal mining.

+ With regard to education, 73% had education beyond the basic nursing degree. Baccalaureate degrees were held by 16.3% of the sample and 6.2% had master's degrees. One person had a Ph.D., two had completed their doctoral programs except their dissertations, and two were currently enrolled in doctoral programs. Sixteen percent were currently enrolled in a baccalaureate program and six percent in a master's program (Mannino, 1963).

The study also included a non-random group of 423 graduates of the Pennsylvania Hospital School of Nursing for Men to determine how many men remain in nursing and examine some of the occupations to which they have gone since leaving nursing. The results showed that 80.2% of the men remained in nursing or related fields (Mannino, 1963).

A final part of Mannino's study compared certain data of male nurses to nurses in general. Table 2 summarizes the findings.
Table 2

Comparison of Male Nurses to Nurses in General in Mannino's (1963) Study

<table>
<thead>
<tr>
<th>Category</th>
<th>Nurses in General</th>
<th>Male Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscribe to Professional Journals</td>
<td>34.90 %</td>
<td>61.40 %</td>
</tr>
<tr>
<td>Membership in Professional Organizations</td>
<td>38.80 %</td>
<td>57.30 %</td>
</tr>
<tr>
<td>Baccalaureate Degrees</td>
<td>7.00 %</td>
<td>16.30 %</td>
</tr>
<tr>
<td>Master's Degrees</td>
<td>1.50 %</td>
<td>6.20 %</td>
</tr>
<tr>
<td>Years in Nursing</td>
<td>17.00</td>
<td>16.30</td>
</tr>
<tr>
<td>Average Age</td>
<td>31.00</td>
<td>37.11</td>
</tr>
<tr>
<td>Median Salary</td>
<td>$5980.00</td>
<td>$6334.50</td>
</tr>
</tbody>
</table>

Mannino (1963) concluded that nursing is a career of second choice for male nurses and that much social mobility occurred in the male nurse sample. Approximately 6% of the parents of the sample were considered as having professions, whereas 96% of the respondents were considered as having a profession. Less than 4% of the sample dropped in professional status. He finally concluded that once a man enters the profession of nursing, he is likely to remain in nursing or some related health field (Mannino, 1963).

In 1966, 1.2% of nurses were men. Aldag and Christensen (1967)
found a scarcity of research on male nursing students and male graduate nurses, corresponding to the small number of males in the occupation. They compared personality profiles of male nursing students in order to determine, among other things, if (1) male students of nursing are more similar to female students of nursing than to other males of similar age and education, and (2) female students of nursing are more similar to male students of nursing than male junior college students are to female junior college students. They administered the short form of the MMPI to 116 subjects divided into the four groups listed above. They found a highly significant correlation of $+0.85$ ($p < 0.01$) when comparing the personality profile of male nursing students to female nursing students. Both were perceived as more likely to appear responsible-generous, more often passive-dependent, less often aggressive-rebellious and had more feminine interests than male and female junior college students.

Vaz (1968) administered a questionnaire that consisted of an attitude scale and a checklist to 506 senior high school boys in New England to describe their attitudes toward nursing as a career. The boys viewed nursing as the least suitable occupation for men. They perceived that men who chose a career in nursing were violating sex role vocational choices.

Williams (1973) studied demographic and background characteristics,
factors that influenced entry into nursing, career goals, and future aspirations of male baccalaureate nursing students. Williams pointed out that health care concepts and delivery were occurring rapidly and suggested that the use of more men in nursing might contribute to meeting the demands and changing health care needs of the future. He believed that if having more men in nursing could help meet these demands, then more men must recruited into nursing. He found little information that explored ways to recruit these men.

Williams (1973) mailed a questionnaire, modified from an instrument constructed by Auster and Auster (1970), to male baccalaureate nursing students from 32 college and university programs in the Western United States that were accredited by the National League for Nursing. The questionnaire contained three parts. Part I consisted of 24 questions related to demographic and background characteristics. Part II consisted of 42 questions about the choice of nursing as a career. Part III consisted of ten questions that considered future plans and goals. Of the 384 questionnaires mailed, 273 (71%) were returned. Responses were analyzed by frequency distributions given in percentages (Williams, 1973). Some of the results of Part I of the study are illustrated in Table 3.
Table 3

Demographic Characteristics of Male Nursing Student Subjects of Williams (1973) Study

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age entering nursing school</td>
<td>23.4 years old</td>
<td>17-58 yrs.</td>
</tr>
<tr>
<td>Grew up in urban area</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Socioeconomic class</td>
<td>Middle class (&gt;50%)</td>
<td></td>
</tr>
<tr>
<td>Grades in high school</td>
<td>Above average (61%)</td>
<td></td>
</tr>
<tr>
<td>Employment before entering present school of nursing</td>
<td>Common--nursing assistants, corpsmen</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>36% single</td>
<td>58% married</td>
</tr>
<tr>
<td>Wife a nurse?</td>
<td>30%</td>
<td></td>
</tr>
</tbody>
</table>

Part II of the questionnaire explored the choice of nursing as a career. Seventy-three percent of the men first considered becoming a nurse after graduation from high school. Over one-half of the respondents indicated that they had begun schooling in another career field but then transferred to nursing. Influences in creating an interest in nursing included friends and previous association with health care. High school guidance counselors were found to play a very insignificant role. Fifty percent consulted with their parents about their decision of career choice. The men, however, were found more frequently to discuss career choice with their mothers than fathers. One-
fourth of the men indicated that their parents played no role in career choice and over one-fourth indicated that their fathers' reactions regarding career choice were unimportant or not very important. Less than one-half of the male students had relatives in nursing or related health areas. When asked why they had entered nursing, 81% responded "the opportunity to help people." Ninety percent indicated that they would probably or definitely choose nursing again if given a choice. Two-thirds would encourage a younger brother or sister to enter nursing (Williams, 1973).

Part III of the Williams' (1973) questionnaire examined future plans and goals. Over three-fourths of the males considered it important to get ahead in life and wanted an opportunity for high occupational mobility. Two-thirds thought that their chances of getting ahead were better than males who were not in nursing. With regard to socioeconomic class, over 50% perceived themselves as middle class, and 80% believed they would be middle class in the next decade indicating upward mobility in 30% of the students. Three-fourths of the men were not in the armed services and 60 percent said they were unlikely to enlist (Williams, 1973).

The majority of men in Williams' (1973) study preferred such nursing specialties as surgery, intensive and coronary care, and nursing education. Approximately one-third of the men preferred the general health field to
nursing and one-fourth indicated they would rather be physician's assistants because of greater rewards, status, and salary. Over 90% thought the number of male nurses would increase in the future (Williams, 1973).

Based on the results of the study, Williams (1973) concluded that recruitment of baccalaureate nursing students needs to start in high school as evidenced by three-fourths of the respondents first thinking about becoming a nurse after graduation from high school. He believed that the fact that high school counselors played an insignificant role in promoting an interest in nursing emphasized a need to orient them to the advantages for men choosing nursing as a career. Using male nurses as role models to familiarize high school boys with nursing's potential as a career choice also would be advantageous. Earlier exposure to nursing as a career choice could also be an advantage, as many male students indicated that experience in the health care delivery system stimulated their first interest in nursing and the fact that many men entered a field other than nursing prior to entering nursing. He also recommended emphasizing those areas known to be of particular interest to males during recruitment efforts.

In 1976, less than 2% of U.S. nurses were males. Bush (1976) stated that status assignment is culturally determined and sex-related rules frequently control entry into occupations. The fact that the concept "male nurse" rather
than just "nurse" exists for males in the nursing profession testifies to one such sex-related rule. People are suspicious of the male nurse's choice of a position traditionally reserved for the lower status sex and that seems likely to incur negative sanctions such as the attribution of homosexuality.

Bush (1976) carried out focused interviews of white male students and graduate nurses at a Midwestern university to investigate how and why men decide to become nurses. Of ten respondents, six were students and four were graduate registered nurses. Seven of ten were married. Demographic data were collected on a structured fact sheet and the rest of the interview was tape recorded with the help of an interview guide of questions and probes to give some structure to the conversation that lasted from 40 to 90 minutes. Questions asked of the males by Bush (1976) included (a) Who are they?; (b) Why do they do it?; (c) What are the conditions under which men will decide to enter nursing?; (d) Why is the enrollment of men in nursing schools increasing?; and (e) How do they cope?

From responses to these questions Bush (1976) concluded that males who enter baccalaureate nursing programs tend to be older, married, and have more education than female nursing students. The three reasons usually mentioned for "why they do it" were job security and opportunity, interest in the biological sciences, and a desire to work in a humanistic field. Several
respondents said that nursing was a secondary choice. "Most of the overt pressures to dissuade men from entry into nursing came from their parents, with the strongest pressures coming from fathers" (p. 396). She found that men who decided to enter nursing, had met at least one of two conditions: the men had had an associated work experience or the prospective student had sought work in the hospital to confirm his choice.

Bush (1976) attributed increasing enrollment of men in nursing schools to "changing perceptions of roles in society in response to the women’s lib [sic] movement, more familiarity with men in nursing roles..., changing opportunities in nursing..., and a belief that people are becoming less likely to stereotype others" (p. 399). Because of concern by others that the male nurse is homosexual, men cope with responses ranging from denial, to anger, or to joking back. Some tried to explain their reasons for going into nursing and some tried to accept that people are "just going to be that way." Several said they benefited from the support of their wives. "Role strain can be reduced by the selection of specialties that do not require giving personal care and in which non-traditional clothing may be worn" (p. 403). In conclusion, Bush (1976) stated that "men who choose nursing as a career generally view themselves as pioneers or innovators. They believe their sex will be an advantage because others in the profession expect them to be leaders,
administrators, and change agents" (p. 404).

Schoenmaker and Radosevich (1976) surveyed 33 male and 58 female nursing students at the University of Iowa by a questionnaire to identify the main reasons why they entered the profession. They found that "the men were older than the women, more apt to be married, had been in college longer, and had more work experience in the health care field" (pp. 298-299). When asked to list three reasons for choosing nursing, job availability was the most frequent response, followed by interest in people, and pay. Working conditions ranked fifth. Women ranked job availability second. Salary and working conditions did not appear among the top five reasons chosen by women. Women, however, gave interest in people top priority (62.1%), whereas 43.8% of men ranked it second.

Students also were asked to "rank in order of preference those areas of nursing in which they would most like to work after graduation" (p. 299). The men indicated a strong preference for critical and acute care settings. In contrast, the women preferred pediatrics, public health nursing, and medical-surgical nursing. When asked if they ever considered dropping out of nursing, approximately 75% of the sample indicated that they had considered this at some time in their careers. One reason given by male nursing students for dropping out of nursing school was lack of male role models as teachers
Schoenmaker and Radosevich (1976) found that men had greater difficulty telling others they were going into nursing. They reported that fellow students often questioned them at length about their choice, reflecting both curiosity and disapproval. They concluded that "women’s liberation and an overall rising of consciousness regarding sex roles are freeing more men to enter female-dominated professions like nursing....Professional nursing will benefit from the addition of new workers who bring with them a broad range of skills and some different approaches to solving nursing problems" (Schoenmaker & Radosevich, 1976, p.302).

Rogness (1976) devised an open-ended questionnaire requiring short, descriptive answers to explore the feelings and experiences of his male classmates in nursing. Fifteen men students from the University of California School of Nursing responded. Rogness’s primary intent was to investigate the hypothesis "that the trauma inherent in the nursing school experience is compounded for men" (p. 305). The hypothesis was supported by the data. In addition to other findings, Rogness (1976) concluded that men in nursing faced the additional difficulties of isolation and loneliness, lack of adequate role models, and dealing with others’ ignorance and stereotypes. Rogness concluded "if we in nursing critically confront societal stereotypes of the man
nurse and search for a clearer perspective on his nursing student experience, perhaps new perceptions will take hold and smooth the acceptance of men into the mainstream of nursing" (p. 305).

In 1984, men constituted 3% of the nursing profession. Alvarez (1984) stated "male registered nurses are one of the least studied and least understood groups in nursing..." (p. 166). He conducted an exploratory descriptive study using a non-probability sample of male registered nurses in New Jersey, to explore and describe selected characteristics of male registered nurses and investigate if there was a relationship between their career choice and their personality characteristics. Ninety-eight questionnaires were distributed through networking among the participants and the nursing departments of major New Jersey hospitals. Thirty-two (approximately 32%) of the questionnaires were returned. The following data (among other) were obtained: the mean age of respondents was 35 years ($SD = 1.9$); the mean amount of years in nursing practice was 12.65 years ($SD = 13.95$); the average salary was $22,001 - 27,000 (reported by 40%) and $27,001 - 35,000 (reported by 25%); 82% would recommend nursing as a career for men because of the career opportunities they believed were available to them (apparently as nurses rather than as males); and 18% would not recommend nursing as a career for men because of poor pay, rotating shifts, weekend duty, and low prestige.
Alvarez concluded that there is a further need for research concerning men in nursing.

Galbraith (1991) discussed the fact that although much interest has been exhibited over the last 20 years to gender and its relationship to work, most of the attention has been focused on working women, not on men who choose work characterized as women’s work. Although researchers have investigated why women pursue traditionally male positions, the reasons for men pursuing careers in traditionally female positions is less understood. He cited Lemkau (1984) who suggested that "a better understanding of those who have made atypical career choices can serve to increase the range of career options considered by young people, thereby contributing to alleviation of sex segregation in our society" (p. 182). Galbraith suggested several reasons for the apparent lack of appeal of nursing to men including: (1) sexism; (2) direct and open discrimination and criticism from peers, coworkers and places of employment; (3) low occupational status; and (4) tension, anxiety, and role strain and reversals. Men also struggle with minority status, gender role conflict, and lack of role models. Galbraith (1991) concurred that research on men in nursing is scarce.

Galbraith (1991) conducted a descriptive study "to increase understanding of the career choices of men in nontraditional careers such as
nursing by exploring what they find important in their career, their sex role identity, and their personality components" (p. 182). One thousand questionnaires were mailed to the following five equal groups of randomly selected potential respondents: male and female nurses, male and female elementary educators, and male engineers. Four hundred seven questionnaires were returned with a response rate, as given by Galbraith, of 46%. The following data (among other) were obtained about the men in nursing (n = 57): they started their nursing career at the age of 26 (the oldest group to start their career); they have had two or more previous occupations (29%); they did not have a role model in deciding on a career (45%, more than any other group); they believed that their career was somewhat better than expected (similar to other groups); they were least likely to be married (52%); and they were most likely to be living with a significant other (9%).

Other results showed that when sex role identity is explored, "the men and women in nursing were similar in the frequency of androgynous and undifferentiated classifications" (Galbraith, 1991, p. 184). When compared to males in elementary education, more men were placed in the masculine category and fewer in the feminine category. When compared to engineers, the opposite was the case. The men in nursing had a greater degree of tough-mindedness than women in nursing. The male nurses also were more dominant...
and self-sufficient when compared to the norms for adult males. The men in nursing and early education found relationship-oriented items in their careers more important than the engineers. No difference was found between the groups in the areas of power, prestige, or money subscales.

Galbraith (1991) concluded that men in nontraditional work roles retain the traditional components of their masculinity and are "open to sex role alternatives without changing their existing sex role identity" (p. 185). He believed that his research had implications for the recruitment of men into the nursing profession by emphasizing the advantages and rewards of relationally oriented work. "The prospective male nurse could benefit from knowing that men in nursing feel that they have been enriched by being able to express both masculine and feminine traits as nongenderized human traits in their personal and professional lives" (p. 186).

Villeneuve (1994) conducted a computerized search of literature, published primarily since 1980, regarding the recruitment and retention of men in nursing. He believed that nursing was undervalued and that most potential candidates lack exposure to male nurses and nursing in general. He also proposed that significant barriers exist to men in nursing education. "Expanding the number of men on faculties will require an affirmative action strategy" (p. 225). Ten years earlier, Johnson, Goad, and Canada (1984)
proposed that "...the recruitment of male nurses as faculty in nursing programs would serve to enhance the image and legitimacy of nursing as a career for men" (p. 390).

Boughn (1994) conducted a qualitative study using grounded theory to discover the characteristics, motivations, and desires of male nursing students to help determine the central issue of why men choose nursing. Unlike previous studies that found men who entered nursing were older, second career and/or lower socioeconomic class, her participants were mostly in their late teens or early twenties, represented several ethnic groups, and were from middle- or upper middle-class families. She concluded that men wanted and expected a career in nursing that would provide them with the following: (1) the opportunity to care for others; (2) job security and financial reward; and (3) power and empowerment as a pre-professional and professional. She also found that not a single man stated that a career in nursing was offered as an option by a high school counselor. She concluded "conscientious efforts to attract men to nursing are necessary to combat the sexism that dissuades men from considering nursing as a career option. As women have determinedly pursued nontraditional work, so should men be able to choose nontraditional work" (p. 411).

Kelly, Shoemaker, and Steele (1996) conducted a qualitative study to
identify male students' perceptions of the image of nursing, motivational factors, barriers, and frustrations encountered in becoming a nurse. Eighteen students attended focus groups located at four central Illinois nursing programs. The researchers found that the students believed their image of nursing was more positive than the public's image; that nursing was attractive because of job opportunities, security and availability; and that family members, especially spouses, were the most encouraging forces to their entering nursing. One perceived barrier in becoming a nurse was reported as lack of encouragement from high school counselors to pursue nursing as a career. Kelly et al. (1996) concluded schools that are interested in recruiting males should be aware of the importance of marketing nursing in an androgynous manner and to not perpetuate the image of nursing as being a feminine profession. The schools also should emphasize job security, diversity and technology as well as the concepts of helping others and caring. Family members should be included in the recruitment process and "high school counselors need to be informed and encouraged to promote nursing as a profession for males, as well as for females" (p. 174). These conclusions may be relevant to the findings of this study.
Summary

The theoretical framework used for this study was social role theory. Social role theory holds as a premise that social life can be compared to the theater in which actors play assigned roles. Career choice is the result of personal experimentation, introspection, self-evaluation, fact finding, and intuition (Newman & Newman, 1979). The fact that some careers are sex-linked may place restrictions on the types of work that are considered by society to be appropriate. Nursing is one such career in that it is still considered to be woman’s work and is dominated by women.

Interestingly, nursing began as a profession of men. Multiple factors, including the industrial revolution and the two world wars, have driven men from nursing, leaving it as a women’s profession. The women’s movement, that occurred after World War II, focused on adjusting sex imbalances in the professions dominated by men. Guidelines to remove gender imbalance did not seem to include professions dominated by females, however, because only in male-dominated professions did substantial adjustment take place (Christman, 1988). One reason for the interest in conducting studies about males in nursing is this gender imbalance.

Many approaches have been used for the studies of men in the nursing profession. Survey research has been most widely used as illustrated in studies
by Mannino (1963), Vaz (1968), Williams (1973), Schoenmaker and Radosevich (1976), Rogness (1976), Alvarez (1984), and Galbraith (1991). Focused interviews were conducted by Bush (1976), Boughn (1994), and Kelly et al. (1996). Standardized test batteries, in this case the MMPI, were utilized by Aldag & Christensen (1967). Villeneuve (1994) conducted a computerized search of the literature.

The literature review revealed that since the studies by Mannino (1963) and Williams (1973), the investigations of the demographic and background characteristics of males in nursing have decreased, especially in the late 1980s. Recent literature seems to be more qualitative and puts more emphasis on the recruitment and marketing of males into nursing without first examining the demographic and background characteristics. Very few studies have done a comparative analysis of demographic and background characteristics of male and female registered nurses. It seems apparent that research is needed to examine the reasons that males and females choose nursing as a profession. It may be necessary to recruit more men into the profession as the occupational market for women becomes more competitive. It will be useful to have more comprehensive data to plan this recruitment.
CHAPTER THREE

METHODOLOGY

The purpose of this study was to examine if there had been any changes over the last 33 years in factors that influence career choices of males and females who become registered nurses. This chapter focuses on the methodology used for the study and consists of the following sections: research design, sample and sampling plan, data collection instrument, data collection procedures, and protection of human subjects. The chapter concludes with a brief summary.

Research Design

To examine factors that have influenced career choices of males and females who become nurses, a descriptive comparative research design was employed. Descriptive studies investigate and describe relationships among variables. Descriptive research predominantly focuses on describing phenomena, rather than explaining them (Polit & Hungler, 1991). A comparative descriptive design "examines and describes differences in variables in two or more groups that occur naturally in the setting" (Burns & Grove, 1987, p. 244). This type of study is important in providing a foundation for identifying significant variables and relationships for future research.
Sample and Sampling Plan

The study took place in Iowa. In 1997, there were a total of 135,498 registered nurses in Iowa. The sample was randomly selected from this total number of registered nurses using the following criteria: (a) Iowa resident; (b) graduated from a diploma, associate degree, baccalaureate, or graduate nursing degree program anywhere in the United States; (c) holding an active license in Iowa; (d) able to read and write English; and (e) consent to participate in the study as evidenced by completion of the questionnaire. There were no exclusion criterion except those implied above.

A total of 32,090 registered nurses fit the investigator’s parameters including sex, level of education, and active status of license. Of this number, the potential sample of registered nurses included 1208 men and 30,882 women. One thousand names (500 male and 500 female) were randomly selected by computer by the Iowa Board of Nursing.

"A sampling plan is developed to increase representativeness, decrease systematic bias and decrease the sampling error" (Burns & Grove, 1987, p. 209). The sampling plan used for this study was probability (or random) sampling. In probability sampling, every element of a population has an opportunity for selection in the sample (Burns & Grove, 1987). Probability sampling is used to produce an accurate and representative sample. There is no
opportunity for systematic bias in the selection of subjects (Polit & Hungler, 1991). Because of the unequal membership size of males to females in nursing, a disproportionate sampling design was used. By selecting 50% males and 50% females, a more adequate representation of males was achieved.

The names of the 500 males were placed in a hat and 150 names were selected. The same process was followed with the names of the 500 females. If it could not be easily determined if the name was male or female, such as initials for the first name or an ambiguous first name, the name was not put in the hat for selection. Questionnaires were then mailed to the randomly selected 150 male and 150 female registered nurses.

A total of 147 of the 300 questionnaires were returned for a response rate of 49%. Of the 147 nurses, 63 were male and 84 were female registered nurses.

Data Collection Instrument

The instrument used to collect data was a structured self-report tool developed by the researcher (Appendix A). The tool includes 33 open-ended and fixed alternative questions. Because the original questionnaires from Mannino’s (1963) and William’s (1973) studies could not be retrieved, the questions were patterned from a combination of the answers provided from the two studies.
The validity and reliability of the instrument has not been established. Neither Mannino (1963) nor Williams (1973) addressed the validity or reliability of the instruments used in their studies. Validity is the degree to which an instrument measures what it is intended to measure (Polit & Hungler, 1991). Reliability is the degree of consistency or dependability with which an instrument measures the attributes it is designed to measure (Polit & Hungler, 1991).

For this study, content validity of the tool was determined by administering the questionnaire to three nurse educators employed at a school of nursing located in central Iowa. Content validity is "the degree to which the items in an instrument adequately represent the universe of content" (Polit & Hungler, 1991, p. 642). The nurse educators were asked to complete the questionnaire and provide comments that they might have with regard to the content. They also were asked to record the length of time required to complete the tool. Only one person had suggestions for revisions of the questionnaire. This revision was to change the wording of one question for clarity. The three nurse educators reported their times for completing the tool as seven minutes, ten minutes, and thirty minutes. Based on these responses, the time for completing the questionnaire was shortened on the cover letter from thirty minutes to twenty minutes.
Data Collection Procedures

The Iowa Board of Nursing provided address labels of 500 male and 500 female registered nurses in Iowa through random selection by computer. The address labels were copied and each label was coded. The labels for the male subjects were placed in a hat and 150 were selected. The same process was followed for the 500 labels for the female subjects. The questionnaires also were coded according to the label code. A total of 300 questionnaires were mailed in February, 1997. Each questionnaire was enclosed with the cover letter (Appendix B) and a stamped, self-addressed envelope. The subjects were asked to return the questionnaire in the stamped, self-addressed envelope within two weeks. Informed consent was determined by the completion and return of the questionnaire. Because the desired sample size of at least fifty male and fifty female registered nurses was reached with the first mailing, a reminder postcard was deemed not to be necessary.

Protection of Human Subjects

Permission to conduct the study was first obtained from the Drake University Human Subject’s Research Review Committee. A cover letter (Appendix B) accompanied each questionnaire to clarify the purpose of the study and inform the subjects of the risks and benefits of the study. The cover letter informed the participants that the study was entirely voluntary and that
they were free to not answer any question that they were uncomfortable answering. The cover letter also informed the subjects that completion of the questionnaire would take about twenty minutes. To maintain confidentiality and anonymity, the participants were informed not to place their names on the questionnaire. The subjects also were informed that the responses would be reported in aggregate and no individual participant would be identified. They were informed that specific questions could be asked by the participants by contacting the researcher or thesis advisor at phone numbers given on the cover letter. A statement that a summary of the findings of the study would be made available upon request also was placed in the letter. The prospective subjects had the right to voluntarily decide whether or not to participate in the study by completing and mailing the questionnaire.

Summary

To examine if there have been any changes in factors that influence career choices of males and females who become nurses over the last thirty-three years, a descriptive comparative research design was employed. A structured self-report tool that included 33 open-ended and fixed alternative questions was developed by the researcher. A total of 300 questionnaires were mailed to 150 male and 150 female randomly selected registered nurses licensed in Iowa. The questionnaire was mailed with a cover letter and a
stamped self-addressed return envelope. A total of 63 male and 84 female
registered nurses responded. Chapter Four analyzes the results of the study.
CHAPTER FOUR

ANALYSIS OF THE DATA

The purpose of this study was to examine if there were any changes in the factors that influence career choices of males and females who become nurses over the last thirty-three years. This chapter is divided into two major sections. The first section presents data to describe the demographic and background characteristics of the sample. Data related to the four research questions are analyzed in the remaining four sections. A brief summary concludes the chapter.

Description of the Sample

Of the 300 mailed questionnaires, 147 were completed and returned, for a 49.0% return rate. Sixty-three of the questionnaires were completed by male registered nurses for a 42.0% rate of return. Eighty-four were completed and returned by female registered nurses for a 56.0% rate of return.

Questions 1 through 28 of the questionnaire queried the demographic and background characteristics of the sample. The questions were patterned from a combination of answers identified in the studies by Mannino (1963) and Williams (1973).

The first question asked the sex of the subjects. As previously mentioned, 50% of the questionnaires were sent to male registered nurses and
50\% to female registered nurses (n = 300). The return rate from males was
42.0\% (n = 63) and 56.0\% (n = 84) from females.

The second question asked the age of the subjects. The ages of the total
sample of registered nurses ranged from 22 to 69 years (M = 41.8, SD =
9.8). The male subjects ranged in age from 22 to 62 years (M = 41.2, SD =
9.43). The female subjects ranged in age from 25 to 69 years (M = 42.2, SD
= 10.05).

The third question asked the subjects to indicate their race. All (100\%)
of the males answered Caucasian. Of the female respondents, 82 (98.8\%)
answered Caucasian. One female nurse indicated that she was Native-
American.

The fourth question asked subjects to designate their religion. The
mode response of both male and female subjects was Catholic, with 16 males
(25.0\%) and 29 females (34.5\%) giving this answer. Lutheran was the second
most common religion identified by the male nurses (17.5\%) and the third
most common response for females (14.3\%). Methodist was the third most
common response for males (12.7\%) and the second most common for females
(17.9\%). Other identified responses from males included 7 Christians (11.1\%),
6 Protestants (9.5\%) and 6 Baptists (9.5\%). One indicated the Mennonite
religion (1.6\%) and 1 identified the United Congressional Church of Christ
as his religious preference. Two males said they had no preference (3.2%) and 5 (7.9%) chose not to answer the question. Other religions for females included 8 Protestants (9.5%), 6 Christians (7.1%) and 3 Presbyterians (3.5%). Two each (2.4%) answered Episcopalian and Pentecostal and one each (1.2%) answered Baptist, Southern Baptist, Congregational, Disciples of Christ, Christian Reformed and Church of Christ. One (1.2%) female registered nurse did not answer the question.

The fifth question asked the marital status of the subjects. The percentage of married males (79.4%) and married females (83.3%) were similar. Nine (14.3%) of the males were single compared to 4 (4.8%) of the females. Four males (6.3%) and 8 females (9.5%) were divorced. Not one of the males and 1 female (1.2%) were widowed. One female (1.2%) identified herself as separated.

Question six asked if the subjects were currently or previously married to a nurse. As illustrated in Figure 1, a much larger percentage of males than females responded yes to this question.
The seventh question of the questionnaire asked how many children the subjects had. Answers ranged from 0 to 6 for males and 0 to 7 for females. Both had an average of 2.6 children. A larger percentage of males, (19.8%), however, had no children as compared to 9.5% of the females. Eleven males (17.5%) and eight females (9.5%) indicated they had one child. Twenty males (31.8%) and 35 females (41.7%) had two children. Eight males (12.7%) and
19 females (22.6%) had three children. Five males (7.9%) and 8 females (9.5%) had four children. Seven males (11.1%) and 6 females (7.2%) had more than four children.

Question eight asked at what age the subjects decided to become nurses. The ages the subjects decided to become nurses for the total sample ranged from 4 to 44 years ($M = 22.3$, $SD = 8.0$). The mode age for the total sample was 18 years. As illustrated in Table 4, the majority of males, 31 (49.2%) decided to become nurses between the ages of 21 and 30 ($M = 26.7$, $SD = 7.0$). The mode ages were 22, 25, and 26 years with 5 subjects each. Forty-five of the females (53.6%) decided to become nurses between the ages of 16 and 20 years ($M = 18.9$, $SD = 6.9$). The mode age was 18 years.
Table 4

**Age Decided to Become a Nurse**

<table>
<thead>
<tr>
<th>Age</th>
<th>Male Number (Percent)</th>
<th>Female Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>0 (0.0)</td>
<td>3 (3.6)</td>
</tr>
<tr>
<td>6-10</td>
<td>0 (0.0)</td>
<td>6 (7.1)</td>
</tr>
<tr>
<td>11-15</td>
<td>2 (3.2)</td>
<td>6 (7.1)</td>
</tr>
<tr>
<td>16-20</td>
<td>12 (19.0)</td>
<td>45 (53.6)</td>
</tr>
<tr>
<td>21-25</td>
<td>16 (25.4)</td>
<td>13 (15.5)</td>
</tr>
<tr>
<td>26-30</td>
<td>15 (23.8)</td>
<td>6 (7.1)</td>
</tr>
<tr>
<td>31-35</td>
<td>8 (12.7)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>36-40</td>
<td>7 (11.1)</td>
<td>3 (3.6)</td>
</tr>
<tr>
<td>41-45</td>
<td>3 (4.8)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>No Answer</td>
<td>0 (0.0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Total</td>
<td>63 (100.0)</td>
<td>84 (100.0)</td>
</tr>
</tbody>
</table>

Question nine asked the subjects how many years they had been in nursing. As depicted in Table 5, answers ranged from 6 months to 52 years ($M = 14.22$, $SD = 10.42$). Answers for males ranged from 6 months to 35
years ($M = 11.8$, $SD = 9.67$). The majority of males (39.7%) had been in nursing for 0 to 5 years. Answers for females ranged from 1 to 52 years ($M = 16$, $SD = 10.61$). The majority of females (21.4%) had been in nursing for 11 to 15 years.

Table 5

**Number of Years in Nursing**

<table>
<thead>
<tr>
<th>Years</th>
<th>Male Number (Percent)</th>
<th>Female Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>25 (39.7)</td>
<td>16 (19.0)</td>
</tr>
<tr>
<td>6-10</td>
<td>9 (14.3)</td>
<td>12 (14.3)</td>
</tr>
<tr>
<td>11-15</td>
<td>8 (12.7)</td>
<td>18 (21.4)</td>
</tr>
<tr>
<td>16-20</td>
<td>7 (11.1)</td>
<td>11 (13.1)</td>
</tr>
<tr>
<td>21-25</td>
<td>7 (11.1)</td>
<td>10 (11.9)</td>
</tr>
<tr>
<td>26-30</td>
<td>3 (4.8)</td>
<td>4 (4.8)</td>
</tr>
<tr>
<td>31-35</td>
<td>4 (6.3)</td>
<td>10 (11.9)</td>
</tr>
<tr>
<td>36-40</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Over 40</td>
<td>0 (0.0)</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>No Answer</td>
<td>0 (0.0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Total</td>
<td>63 (100.0)</td>
<td>84 (100.0)</td>
</tr>
</tbody>
</table>
Question ten asked the subjects what their most recent nursing position is (was). Because no parameters were given for the answer, some subjects addressed their work setting and others addressed their nursing position. As illustrated in Table 6, the following categories were determined to simplify the results: staff nurse, management, advanced registered nurse practitioner (ARNP), educator, and other. Nursing positions in the category of other included such positions as school nurse, office nurse, insurance company nurse, camp nurse and quality management nurse. The numbers add up to more than the number of respondents (male, n = 63, female, n = 84) due to some respondents giving multiple answers. The total number of responses were considered when calculating percentages.
Table 6

**Most Recent Nursing Position**

<table>
<thead>
<tr>
<th>Position</th>
<th>Male Number (Percent)</th>
<th>Female Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Nurse</td>
<td>36 (54.5)</td>
<td>43 (48.9)</td>
</tr>
<tr>
<td>Management</td>
<td>9 (13.6)</td>
<td>17 (19.3)</td>
</tr>
<tr>
<td>ARNP</td>
<td>10 (15.2)</td>
<td>5 (5.7)</td>
</tr>
<tr>
<td>Educator</td>
<td>1 (1.5)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Other</td>
<td>10 (15.2)</td>
<td>21 (23.9)</td>
</tr>
<tr>
<td>No Answer</td>
<td>0 (0.0)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Total</td>
<td>66 (100.0)</td>
<td>88 (100.0)</td>
</tr>
</tbody>
</table>

Question eleven asked what position the respondent aspired to obtain.

Due to multiple categories of answers (as with question 10), the same categories for question 10 were used with the addition of "researcher." As illustrated in Table 7, an equal percentage of males (33.3%) and females (33.3%) said they had achieved their aspired position. A larger proportion of males (18.7%) aspired to obtain management positions than females (7.1%). Similarly a larger percentage of males aspired to ARNP positions (12.5%) than females (4.8%). Six males (9.4%) and 24 females (28.6%) chose not to
answer this question. Positions in the category of other included such answers as doctor of osteopathy, physician assistant, school nurse, non-nursing positions, and retirement.

Table 7

Position Aspired to Obtain

<table>
<thead>
<tr>
<th>Position</th>
<th>Male Frequency (Percent)</th>
<th>Female Frequency (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieved</td>
<td>21 (33.3)</td>
<td>28 (33.3)</td>
</tr>
<tr>
<td>Undecided</td>
<td>6 (9.5)</td>
<td>6 (7.1)</td>
</tr>
<tr>
<td>Staff Nurse</td>
<td>5 (7.9)</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>Management</td>
<td>12 (19.1)</td>
<td>6 (7.1)</td>
</tr>
<tr>
<td>ARNP</td>
<td>8 (12.7)</td>
<td>4 (4.8)</td>
</tr>
<tr>
<td>Educator</td>
<td>1 (1.6)</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>Researcher</td>
<td>0 (0.0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (7.9)</td>
<td>11 (13.1)</td>
</tr>
<tr>
<td>No Answer</td>
<td>5 (7.9)</td>
<td>24 (28.6)</td>
</tr>
<tr>
<td>Total</td>
<td>63 (100.0)</td>
<td>84 (100.0)</td>
</tr>
</tbody>
</table>

Question twelve asked the subjects' most recent annual nursing salary. Unfortunately the question did not ask if the respondent was full or part-time.
As indicated in Table 8, the annual nursing salary range for males was $14,000 to $175,000. The median annual nursing salary for the male nurses was $34,000 which was higher than the $30,000 median annual nursing salary for females. Most males (25.4%) stated they earned $30,000 to $34,000 with a mode of $30,000. The salary range of females was $13,000 to $50,000. Most females (21.4%) stated they earned $25,000 to $29,000, with a mode of $27,000. Eleven (13.1%) females designated themselves as part time. Their salaries were computed with the rest by using their hourly rate. Six males (9.5%) and twelve females (14.3%) chose not to answer this question.
Table 8

Current Annual Nursing Salary

<table>
<thead>
<tr>
<th>Salary (in thousands)</th>
<th>Male Frequency (Percent)</th>
<th>Female Frequency (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>1 (1.6)</td>
<td>3 (3.6)</td>
</tr>
<tr>
<td>20-24</td>
<td>2 (3.2)</td>
<td>6 (7.1)</td>
</tr>
<tr>
<td>25-29</td>
<td>12 (19.0)</td>
<td>18 (21.4)</td>
</tr>
<tr>
<td>30-34</td>
<td>16 (25.4)</td>
<td>15 (17.9)</td>
</tr>
<tr>
<td>35-39</td>
<td>7 (11.1)</td>
<td>11 (13.1)</td>
</tr>
<tr>
<td>40-44</td>
<td>10 (15.9)</td>
<td>5 (5.9)</td>
</tr>
<tr>
<td>45-49</td>
<td>2 (3.2)</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>50 or over</td>
<td>7 (11.1)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>No Answer</td>
<td>6 (9.5)</td>
<td>12 (14.3)</td>
</tr>
<tr>
<td>Part Time</td>
<td>0 (0.0)</td>
<td>11 (13.1)</td>
</tr>
<tr>
<td>Total</td>
<td>63 (100.0)</td>
<td>84 (100.0)</td>
</tr>
</tbody>
</table>

Question thirteen asked the subjects if they subscribed to a nursing journal and if yes, to designate the journals. A larger percentage of males (54.0%) than females (46.4%) answered yes to this question. The 34 males subscribed to a total of 45 nursing journals ($M = 1.3$). The 39 females
subscribed to a total of 56 nursing journals ($M = 1.4$). The most frequently identified nursing journals that the subjects subscribed to were the same for males and females: *RN*, 10 males (29.4%) and 14 females (35.9%); *Nursing 97*, 9 males (26.5%) and 14 females (35.9%); and *American Journal of Nursing*, 8 males (23.5%) and 7 females (17.9%). Other popular nursing journals for males included *AANA Journal* (20.6%), *Critical Care Nurse* (8.8%) and *Journal of Emergency Medicine* (5.9%). Six males (17.6%) subscribed to other nursing journals. Other popular journals for females included *Orthopedic Nursing* (7.7%) and *AORN Journal* (5.1%). Sixteen females (41.0%) subscribed to other nursing journals.

Question fourteen asked if the subjects belonged to a nursing organization and if yes, to designate the organization(s). A higher percentage of males (34.9%) belonged to a nursing organization than females (29.8%). Two males (3.2%) chose to not answer this question. The 22 males belonged to a total of 31 nursing organizations ($M = 1.4$). The 25 females belonged to a total of 29 nursing organizations ($M = 1.2$). The organizations varied between males and females. The most popular nursing organizations for males were American Association of Nurse Anesthetists (36.4%), Iowa Association of Nurse Anesthetists (18.2%), and Emergency Nurses Association (18.2%). Other nursing organizations that males belonged to were AACN (13.6%),
American Nurses' Association (18.2%), and Sigma Theta Tau (9.1%). Six males (27.3%) belonged to nursing organizations not listed. The most popular nursing organizations for females were American Nurses’ Association (20.0%), Association of Operating Room Nurses (12.0%), National Association of Obstetrical Nurses (12.0%), and Emergency Nurses’ Association (8.0%). Sixteen females (64.0%) belonged to other nursing organizations not listed.

Question fifteen of the questionnaire asked if the subjects had relatives in nursing, and if yes, to list relationships and numbers. A slightly higher percentage of females (61.9%) than males (55.6%) had relatives in nursing. The 35 males had a total of 73 relatives in nursing ($M = 2.1$). Thirty-two males (91.5%) had 1 to 3 relatives in nursing and three males (8.5%) had 5 or 6 relatives each. The 52 females had a total of 95 relatives in nursing ($M = 1.8$). Forty-seven females (90.4%) had 1 to 3 relatives in nursing and 5 (9.6%) had 4 or 6 relatives each. The most common relationships are depicted in Figure 2.
Figure 2

Relatives in Nursing

*Male relatives include brother, nephew, step-brother and son. There were no fathers. The sex of "cousins" was not indicated.
Question sixteen asked the subjects for their highest level of nursing education. As indicated in Table 9, the highest level of nursing education for males was Associate Degree in Nursing (ADN) (52.4%). The highest level of nursing education for females, however, was a nursing diploma (39.3%).

Table 9

<table>
<thead>
<tr>
<th>Highest Level of Nursing Education of Male and Female Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Diploma</td>
</tr>
<tr>
<td>Associate Degree in Nursing</td>
</tr>
<tr>
<td>Bachelor of Science in Nursing</td>
</tr>
<tr>
<td>Master of Science in Nursing</td>
</tr>
<tr>
<td>Doctoral degree</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Question seventeen asked if the respondents were currently enrolled in an advanced nursing education program. Slightly more females (9.5%) were enrolled in an advanced nursing education program than males (6.3%). Of the 4 males that were currently enrolled in an advanced nursing education program, 3 (75%) were seeking a Bachelor of Science in Nursing degree and 1
was seeking a Master of Science in Nursing degree. They believed it would take an average of 14.5 months to complete these programs. Of the 8 females that were currently enrolled in an advanced nursing education program, 6 (75%) were seeking a Bachelor of Science in Nursing degree and 2 (25%) were seeking a Master of Science in Nursing degree. They believed it would take an average of eighteen months to complete these programs although 3 stated they did not know how long it would take.

Question eighteen asked if the subjects had been in the armed forces and if yes, what branch. A higher percentage of males (36.5%) than females (3.6%) had been in the armed forces. Of the 23 males in the armed forces, 12 (52.2%) were in the Army, 4 (17.4% each) were in the Navy and Air Force, 2 (8.7%) were in the Marines and one (4.3%) was in the National Guard. Of the three females in the armed forces, there was one each in the Army, Navy, and Air Force. Question eighteen also asked if the subjects were armed forces nurses. Six (26.1%) of the 23 males in the armed forces also were armed forces nurses. Two of the 3 females in the armed forces were armed forces nurses.

Question nineteen asked the subjects how old they were when they entered a nursing educational program. The age range for all subjects when they entered a nursing educational program was 17 to 48 years (M = 24.0,
As illustrated in Table 10, the age range for the male subjects was 18 to 43 years ($M = 27.2$, $SD = 6.5$). Most males (31.7%) were 25 to 29 years of age when they entered a nursing educational program. The age range of females was 17 to 48 years ($M = 21.7$, $SD = 6.8$). Most females (63.1%) were under the age of 20.

Table 10

**Age When Entered a Nursing Educational Program**

<table>
<thead>
<tr>
<th>Age</th>
<th>Male Number (Percent)</th>
<th>Female Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>8 (12.7)</td>
<td>53 (63.1)</td>
</tr>
<tr>
<td>20-24</td>
<td>14 (22.2)</td>
<td>13 (15.5)</td>
</tr>
<tr>
<td>25-29</td>
<td>20 (31.7)</td>
<td>8 (9.5)</td>
</tr>
<tr>
<td>30-34</td>
<td>11 (17.5)</td>
<td>3 (3.6)</td>
</tr>
<tr>
<td>35-39</td>
<td>7 (11.1)</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>40 or over</td>
<td>3 (4.8)</td>
<td>4 (4.7)</td>
</tr>
<tr>
<td>No Answer</td>
<td>0 (0.0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Total</td>
<td>63 (100.0)</td>
<td>84 (100.0)</td>
</tr>
</tbody>
</table>

Question twenty asked where, or from whom, the subjects received information about nursing education. Males and females had very similar
responses for three of the answers. Twenty-one males (30.9%) and 28 females (28.6%) received information about nursing education from community colleges, colleges, and universities. Sixteen males (23.5%) and 21 females (21.4%) received information from friends and relatives. Seven males (10.3%) and 7 females (7.1%) received information from nurses or nursing students. Interestingly, however, only 3 males (4.4%) received information about nursing education from guidance counselors compared to 26 or 26.5% of the females. As a result, 9 males (13.2%) received information through researching on their own or by other means compared to 4 females (4.1%).

Four of the males (5.9%) were in the medical field before entering nursing. Three males (4.4%) and 3 females (3.1%) did not recall how they received the information. Five males (7.4%) and 9 females (9.2%) chose not to answer this question.

Question twenty-one asked the subjects if they had a college degree in a field in addition to nursing and if yes, to indicate the field and major. A much larger percentage of males (44.4%) than females (13.1%) responded yes to this question. Twenty males listed their additional degrees, with the most common being BS (6), BA (5), AA (4), and AS (2). Six females listed their additional degrees including BS (3), BA (1), AA (1), and MS (1). Twenty-five males listed their field or major. These included biology (4), health sciences (3),
health care administration (3), psychology (2), business (2), and other (11). The category, other, included such fields or majors as English, sociology, education, pre-med, and liberal arts. Five females listed their field or major that included 1 each in medical transcription, law, family studies, teaching, and business.

Question twenty-two of the questionnaire asked if the subjects had a career prior to nursing and if yes, to indicate the career. Males were more likely than females to have a career before nursing, (58.7%), listing 1 to 4 careers, with a total of 65 careers ($M = 1.8$). Eleven females (13.1%) listed 1 to 2 careers prior to nursing with a total of 13 careers ($M = 1.2$). The 65 careers listed by males included paramedic (6), military (5), farmer and business owner (3 each), medical technologist, EMS, accountant, carpenter, teacher, laborer, and restaurant manager (2 each). Ten identified other health-related fields and 23 identified other occupational fields. One male chose not to answer the question. The 13 careers identified by females included other health-related careers (4), receptionist/secretary (2) and other occupational fields (7).

Questions twenty-three and twenty-four of the questionnaire asked what is (was) the occupation of the subjects’ mother and father respectively. These responses were placed into categories previously developed by the Iowa Work
Force Development Agency. The largest percentage of parents of both male and female subjects were in category 2 (professional, paraprofessional and technical). The largest variation in the occupation of male parents versus female parents was in category 5 (service occupations). No mothers were in category 6 (agriculture, forestry, and fishing). Category 9 (homemakers) was added because of the large number of responses. There were no males in this category. Two males (3.2%) stated they did not know their fathers' occupation. One female (1.2%) stated she did not know her mother's occupation. One male (1.6%) chose to not answer the question about his mother's and father's occupation. Figure 3 presents the comparisons between the occupations of the male and female subjects' fathers and mothers.
Figure 3

Occupation of Subjects' Parents

*Occupational Code

Female Father
Female Mother
Male Father
Male Mother

0.00% 5.00% 10.00% 15.00% 20.00% 25.00% 30.00% 35.00% 40.00% 45.00% 50.00%
Occupational Codes:

1. Executive and managerial
2. Professional, paraprofessional, and technical
3. Marketing and sales
4. Administrative support and technical
5. Service
6. Agriculture, forestry, and fishing
7. Precision, production, crafts and repair
8. Machine and system, fabricator, laborer
9. Homemaker

Question twenty-five asked if the subjects consulted with their parents about their decision to enter nursing. If the subjects answered yes, they were to indicate with which parent did they consult, what was their response and was their response important? A much larger percentage of females (69.0%) consulted with their parents than males (36.5%). Of these, three males (13.0%) and 12 females (20.7%) consulted only their mothers. One male (4.4%) and 3 females (5.2%) consulted only their fathers and 19 males (82.6%) and 43 females (74.1%) consulted both parents. Twenty-one males (91.3%) and 52 females (89.7%) described their parents’ responses as positive. Two males (8.7%) and 3 females (5.2%) described their parents’ responses as negative. Two females (3.4%) stated they got mixed responses from their parents and 1 female (1.7%) chose not to answer the question with regard to her parents’ response. Nearly equal percentages of the male subjects (87.0%)
and female subjects (86.2%) identified their parents' responses as important to them. One male (4.3%) and 2 females (3.5%) said their parents' responses were somewhat important to them. One female (1.7%) chose not to answer this part of the question.

Question twenty-six asked the subjects what they would estimate to be the annual total income of the family with which they resided while growing up. There were wide variations in this answer due to older subjects having grown up when incomes were much lower. The range of incomes for families of males was $5000 to $500,000. The largest percentage of males (25.4%) had grown up in a family where the income was $20,000 to $29,000. The median annual income of the family with which the male nurses grew up was $30,000. The range of incomes for the family with which the female subjects resided while growing up was $3000 to $90,000. The largest percentage of females (14.3%) had grown up in a family where the income was $30,000 to $39,000. The median annual income of the family with which the female nurses grew up was $30,000.

Question twenty-seven asked for the population of the area in which the subjects resided while growing up. As indicated in Table 11, the largest percentage of males (30.2%) had resided in an area they described as a small
city (2,500-14,999 population). The largest percentage of females (31.0%) had resided in an area they described as a farm.

Table 11

<table>
<thead>
<tr>
<th>Population</th>
<th>Male Number (Percent)</th>
<th>Female Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm</td>
<td>13 (20.634)</td>
<td>26 (31.0)</td>
</tr>
<tr>
<td>Small Town (&lt; 2500)</td>
<td>13 (20.634)</td>
<td>21 (25.0)</td>
</tr>
<tr>
<td>Small City (2500-14,999)</td>
<td>19 (30.2)</td>
<td>16 (19.0)</td>
</tr>
<tr>
<td>Large City (15,000-99,999)</td>
<td>13 (20.634)</td>
<td>12 (14.3)</td>
</tr>
<tr>
<td>Suburb (within 15 miles of a metro area)</td>
<td>0 (0.0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Metro Area (100,000 or more)</td>
<td>5 (7.9)</td>
<td>7 (8.3)</td>
</tr>
<tr>
<td>No Answer</td>
<td>0 (0.0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Total</td>
<td>63 (100.0)</td>
<td>84 (100.0)</td>
</tr>
</tbody>
</table>

Question twenty-eight asked what the subjects considered their academic grades while in school. The majority of males (52.4%) and females (57.1%) considered their grades to be above average. Eight males (12.7%) and 15 females (17.9%) considered their grades to be excellent. Twenty-two males (34.9%) and 20 females (23.8%) considered their grades to be average. Not
one of the male or female subjects considered their grades to be below average.
Research Question 1

The first research question was: What factors influence males and females to choose nursing as a career? To answer this first research question, responses to four questions (30, 31, 32, and 33) of the Nurse Characteristics Questionnaire (Appendix A) that asked (30) What factors influenced you to choose nursing as a career?; (31) If given a choice, would you choose nursing as a career again? Why or why not?; (32) Would you recommend nursing as a career? Why or why not? and (33) Have you or do you plan to leave the nursing profession? Why or why not? were analyzed. These questions required a short response from the sample in which they were asked to list all information they perceived as important in answering the questions.

Question 30 asked the subjects what factors influenced them to choose nursing as a career. To analyze these data, responses from the male and female subjects were listed and similarities in responses were identified. The responses were then ranked according to frequency of response. The 12 highest ranked factors identified as influencing males to choose nursing as a career are displayed in Table 12.
Table 12

Ranked Factors Influencing Males to Choose Nursing as a Career

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>1</td>
<td>To help people</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Interest in medical field</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Job opportunities</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Previous health care experience</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Salary</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Job security</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Flexibility</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Only 2 years college</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Challenge</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Job market</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Caring for patients</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Personal or family medical crisis</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 13 displays the highest ranked twelve factors that the female subjects identified that influenced their choice of nursing as a career.
## Table 13

*Ranked Factors Influencing Females to Choose Nursing as a Career*

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Female</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To help people</td>
<td>32</td>
<td>24.2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Job market</td>
<td>11</td>
<td>8.3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Caring for patients</td>
<td>9</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Interest in medical field</td>
<td>9</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Salary</td>
<td>9</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Interest in science</td>
<td>6</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Job security</td>
<td>6</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Life long ambition</td>
<td>6</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Previous health care experience</td>
<td>5</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Job opportunities</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Lack of options</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Role model</td>
<td>3</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Question 31 asked the sample, if given a chance, would they choose nursing as a career again. The question further asked if yes, why, and if no, why not. Thirty-nine (61.9%) males and forty-nine (58.3%) females identified
they would choose nursing again. Twenty males (31.7%) and twenty-six females (31.0%) said they would not choose nursing again. Three males (4.8%) and nine females (10.7%) were unsure if they would choose nursing again. The responses from the males and females who identified they would choose nursing again were listed and similarities in responses were identified. The responses were then ranked according to frequency of response. The same process was followed with the responses from the male and female nurses who indicated they would not choose nursing as a career again. The five highest ranked factors that would influence males to choose nursing again are displayed in Table 14.

Table 14

Ranked Factors Influencing Males to Choose Nursing as a Career Again

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fulfilling</td>
<td>18</td>
<td>43.9</td>
</tr>
<tr>
<td>2</td>
<td>Job opportunities</td>
<td>8</td>
<td>19.5</td>
</tr>
<tr>
<td>3</td>
<td>Help people</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>4</td>
<td>Flexibility</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>5</td>
<td>Salary</td>
<td>1</td>
<td>2.4</td>
</tr>
</tbody>
</table>
The five highest ranked factors that would influence females to choose nursing again are displayed in Table 15. The only difference in the factors between male and female nurses was the fact that rankings 2 and 3 were switched.

Table 15

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fulfilling</td>
<td>24</td>
<td>41.4</td>
</tr>
<tr>
<td>2</td>
<td>Help people</td>
<td>12</td>
<td>20.7</td>
</tr>
<tr>
<td>3</td>
<td>Job opportunities</td>
<td>9</td>
<td>15.5</td>
</tr>
<tr>
<td>4</td>
<td>Flexibility</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td>5</td>
<td>Salary</td>
<td>3</td>
<td>5.2</td>
</tr>
</tbody>
</table>

The five highest ranked factors identified that would influence males to not choose nursing as a career again if given a chance are displayed in Table 16.
Table 16

**Ranked Factors Influencing Males to Not Choose Nursing as a Career Again**

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor pay</td>
<td>9</td>
<td>27.3</td>
</tr>
<tr>
<td>2</td>
<td>Disillusioned</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>3</td>
<td>Advancement limited</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>4</td>
<td>Poor hours</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>5</td>
<td>Stress, disrespect</td>
<td>3</td>
<td>9.1</td>
</tr>
</tbody>
</table>

The five highest ranked factors identified that would influence females to not choose nursing as a career again if given a chance are displayed in Table 17.
Table 17

Ranked Factors Influencing Females to Not Choose Nursing as a Career Again

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stress, disrespect</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Poor pay</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Poor hours</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Would choose another health-related career</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Disillusioned</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress, disrespect</td>
<td>13</td>
<td>30.2</td>
</tr>
<tr>
<td>Poor pay</td>
<td>7</td>
<td>16.3</td>
</tr>
<tr>
<td>Poor hours</td>
<td>7</td>
<td>16.3</td>
</tr>
<tr>
<td>Would choose another health-related career</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td>Disillusioned</td>
<td>3</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Four of the five highest ranked factors that would influence male and female nurses to not choose nursing as a career again are the same. The only differences were ranking 3 "advancement limited" for males and ranking 4 "would choose another health related career" for females.

Question thirty-two asked the subjects if they would recommend nursing as a career. The question further asked if yes, why, and if no, why not. Thirty-nine males (61.9%) and fifty-two females (61.9%) said they would recommend nursing as a career. Twenty males (31.7%) and seventeen females (20.2%) stated they would not recommend nursing as a career. Two males
(3.2%) and fourteen females (16.7%) were unsure if they would recommend nursing as a career.

The responses from the males and females who identified they would recommend nursing as a career were listed and similarities in responses were identified. The responses were then ranked according to frequency of response. The same process was followed with the responses from male and female nurses who indicated they would not recommend nursing as a career. The six highest ranked factors that would cause males to recommend nursing as a career are displayed in Table 18.

Table 18

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Opportunities</td>
<td>11</td>
<td>28.9</td>
</tr>
<tr>
<td>2</td>
<td>Fulfilling</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>3</td>
<td>Salary</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>4</td>
<td>Security</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>5</td>
<td>Interest in people</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>6</td>
<td>Must like it</td>
<td>4</td>
<td>10.5</td>
</tr>
</tbody>
</table>
The six highest ranked factors that would cause females to recommend nursing as a career are displayed in Table 19.

Table 19

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fulfilling</td>
<td>3</td>
<td>5.4</td>
</tr>
<tr>
<td>2</td>
<td>Opportunities</td>
<td>13</td>
<td>23.2</td>
</tr>
<tr>
<td>3</td>
<td>Must like it</td>
<td>10</td>
<td>17.9</td>
</tr>
<tr>
<td>4</td>
<td>Would recommend more education such as BSN</td>
<td>4</td>
<td>7.1</td>
</tr>
<tr>
<td>5</td>
<td>Salary</td>
<td>3</td>
<td>5.4</td>
</tr>
<tr>
<td>6</td>
<td>Interest in people</td>
<td>2</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Five of the six highest ranked factors influencing male and female nurses to recommend nursing as a career are the same. The only difference was ranking 4 "security" for males and ranking 4 "would recommend more education such as a BSN" for females. The highest ranked five factors that would cause males not to recommend nursing as a career are displayed in Table 20. The five highest ranked factors that would cause females not to recommend nursing as a career are displayed in Table 21.
<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Disillusioned</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>2</td>
<td>Poor salary</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>3</td>
<td>Government interference</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>4</td>
<td>Poor hours</td>
<td>3</td>
<td>12.4</td>
</tr>
<tr>
<td>5</td>
<td>Hard work</td>
<td>1</td>
<td>4.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factor</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor hours</td>
<td>7</td>
<td>25.0</td>
</tr>
<tr>
<td>2</td>
<td>Hard work</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>3</td>
<td>Disillusioned</td>
<td>4</td>
<td>14.3</td>
</tr>
<tr>
<td>4</td>
<td>Poor salary</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>5</td>
<td>Government interference</td>
<td>3</td>
<td>10.7</td>
</tr>
</tbody>
</table>
All five of the factors influencing male and female nurses not to recommend nursing as a career are the same. The only difference was in the ranked order by males and females.

Question thirty-three asked if the subjects had left or planned to leave the nursing profession. It further asked if the respondent answered yes, why and if no, why not. Of the male subjects, 17.4% had left or planned to leave nursing and 19.0% of the female subjects had left or planned to leave nursing. Of the male subjects, 74.6% did not plan to leave nursing and 4.8% were unsure. Of the female subjects, 66.7% did not plan to leave nursing and 14.3% were unsure.

The highest ranked reasons given by males for leaving or planning to leave nursing were retirement, to go to medical school, because of government interference and to make more money (2 subjects each). The highest ranked reasons given by female nurses for leaving or planning to leave nursing were retirement (7 subjects) and poor hours (3 subjects).

The highest ranked reasons given by males for not leaving nursing were nursing is fulfilling (15 subjects), nursing has many opportunities (3 subjects) and the salary is good (2 subjects). The highest ranked reasons given by female nurses for not leaving nursing were nursing is fulfilling (16 subjects),
needing to work (4 subjects), enjoying learning new things (3 subjects), and does not want to go back to school (2 subjects).

The factors that influence males and females to choose nursing as a career appear similar. Both male and female nurses ranked "to help people" as the top factor. Both also ranked "interest in medical field" and "salary" as one of the factors most influential in choosing nursing. Most male and female nurses identified they would choose nursing as a career again if given a chance and both identified the following same factors as influencing them to choose nursing again: nursing is fulfilling, offers job opportunities, gives an opportunity to help people, offers flexibility and a good salary. Equal percentages of male and female nurses would recommend nursing as a career. Both males and females ranked "job opportunities," "fulfilling," "salary," "an interest in people" and "must like it" in the six highest ranked factors that would influence them to recommend nursing as a career.

Research Question 2

The second research question was: What influence do the demographic and background characteristics have in influencing males and females to choose nursing as a career? To answer the second research question, the responses to questions three through twenty-eight on the Nurse Characteristic Questionnaire were analyzed. These questions addressed age, race, religion,
marital status, number of children and other demographic data about the subjects.

The demographic variables of age, race, religion, marital status, and number of children of the male and female respondents were similar. There were, however, a larger percentage of single males (14.3%) than females (4.8%) and a much larger percentage of male nurses (42.9%) who were currently or previously married to nurses than the female nurses (1.2%). A larger percentage of males (19.8%) than females (9.5%) had no children.

The age at which the subjects decided to become nurses could be influential in choosing nursing as a career because men tend to be older and have had more life experiences when they become nurses than their female counterparts. The mean age at which the male respondents decided to become nurses was 26.7 years. The mean age at which the female respondents decided to become nurses was 18.9 years. When an independent t-test was applied to determine if there was a significant difference between the two groups, a statistically significant difference was found ($t = 6.67, p = < 0.0005$). The male subjects decided to become nurses at a significantly higher age than the female subjects.

It is unclear if salary could influence persons to choose nursing as a career. The salary for nursing is higher than for some other professions, and
male nurses tend to have a higher median salary ($34,000) than female nurses ($30,000), but there is no basis for comparison with other careers.

Having relatives in nursing and the number of relatives in nursing could influence the subject to choose nursing as a career. Talking with these relatives about nursing and seeing the positive influence that nursing has had on their relatives' lives could influence a person to become a nurse. A high percentage of the subjects have relatives in nursing (female nurses, $M = 1.8$, male nurses, $M = 2.1$).

More than one-third of the male subjects were in the armed forces and, of this third, more than one-fourth were nurses in the armed forces. Less than 4% of the female subjects were in the armed forces. The life experiences of having been in the armed forces and previous exposure to the health care field could have been a factor that influenced males to choose nursing as a career.

The age at which the subjects entered a nursing educational program could be influential in choosing nursing as a career. Many of the males were older and had had a previous career or college degree prior to choosing nursing. This allowed them time to reflect on their choices and determine which career was best for them. The mean age of the male subjects when they entered a nursing educational program (27.2 years) was older than the mean age of the female subjects when they entered a nursing educational program.
When an independent t-test was applied to determine if there was a significant difference in age between the two groups, a statistically significant difference was found in the age at which the males and females entered a nursing program was found \( (t = 4.88, \ p = < 0.0005) \). The male subjects entered a nursing educational program at a significantly older age than the female subjects.

Where, or from whom, the subjects received information about nursing education is also relevant with regard to analyzing variables that influenced the subjects to choose nursing as a career. Information about nursing education can be obtained from various sources. An enthusiastic respondent, especially a role model, can be a positive factor. If it requires an effort to elicit a response, this can be a negative factor. Although almost equal percentages of males and females received information from community colleges, colleges, universities, friends, relatives, nurses, and nursing students, a much smaller percentage of males (4.4\% \%) than females (26.5\% \%) received information about nursing education from high school guidance counselors.

The fact that a much larger percentage of males (44.4\% \%) than females (13.1\% \%) had a college degree in a field other than nursing as well as a career prior to nursing could be relevant factors in influencing persons to choose nursing as a career. Persons often take on new roles as they move from one
stage of life to another. The experiences of a previous college degree or career could have an influence in preparing the person for a new role. Males also averaged more careers ($M = 1.8$) prior to nursing than females ($M = 1.2$).

The occupations of the subjects' mothers and fathers also could be influential in the respondents' choosing nursing as a career. Persons are often looking for upward mobility and seeking a career with higher status than that of their parents. Most parents of both male and female nurse were classified as professional, paraprofessional, and technical; males (father, 19.0%; mother 22.2%); females, (father, 17.6%; mother 17.8%). More of the males' parents (father, 15.9%; mother, 12.7%) than females' parents (father, 2.4%; mother, 4.8%) were in the category of service occupations.

Parents appeared to be more influential with regard to females choosing nursing as a career than males. Males may be reluctant to share with their parents that they are thinking of entering an occupation associated with feminine qualities. A much larger percentage of females (69.0%) than males (36.5%) consulted with their parents about their decision to enter nursing. Nearly equal percentages described their parents' responses to be positive (male, 91.3%; female, 89.7%) and important to them (male, 87.0%; female 86.2%).
Research Question 3

The third research question was: What differences or similarities exist between those factors that influence males to choose nursing as a career and those that influence females to choose nursing as a career? The factors that influenced males and females to choose nursing as a career and the influence of demographic and background characteristics on males and females in choosing nursing as a career were discussed with research questions one and two. The similarities in factors that influenced the male and female respondents in this study to choose nursing as a career will be discussed first.

The mean age of the male and female respondents was similar. Nearly 100% of the subjects were Caucasian. The religions of the largest majority of both male and female subjects were Catholic, Lutheran, and Methodist.

The majority of both male and female subjects were married, with an average of 2.6 children. More than one-half of both the male and female subjects had relatives in nursing. Most male and female subjects were currently in the position of staff nurse and equal percentages stated they had achieved the position they aspired to obtain.

Most males and females received the majority of information about nursing education from community colleges, colleges, and universities; friends and relatives; and nurses or nursing students. The occupations of most parents
of both males and females were classified as professional, paraprofessional, and technical.

Nearly equal numbers of males and females stated that their parents responded positively when consulted about the subjects' decision to enter nursing and their parents' responses were important to them. Both males and females considered their grades while in school to be above average.

Both male and female nurses ranked helping people as the highest factor that influenced them to choose nursing as a career. Approximately 60% of both males and females, if given a chance, would choose nursing as a career again with the priority factor for both being that nursing is fulfilling as a career. Approximately 31% of both males and females would not choose nursing as a career again. Equal percentages of males and females (61.9%) would recommend nursing as a career.

Although there were similarities in the factors that influence males and females to choose nursing as a career, there were also significant differences between those factors that influence males and females to choose nursing as a career. Even though the percentage of married male nurses (79.4%) was very similar to the percentage of married female nurses (83.3%), 14.3% of the males were single compared to 4.8% of the females. A much larger percentage
of males (42.9%) were married to nurses than females (1.2%). A larger percentage of males (19.8%) had no children compared to females (9.5%).

Males were older ($M = 26.7$ years) when they decided to become a nurse than females ($M = 18.9$ years). Males had been in nursing for fewer years ($M = 11.8$) than females ($M = 16$). This may be attributable to the older age at which males decided to become a nurse. Although the most recent nursing position of both male and female subjects was staff nurse, a larger percentage of males (19.1%) than females (7.1%) aspired to obtain a leadership position.

The percentage of females who had relatives in nursing (61.9%) was larger than the percentage of males who had relatives in nursing (55.6%). Males, however, averaged 2.1 relatives each, compared to an average of 1.8 relatives each for females. The relatives of males were more likely to be their mothers, sister-in-laws, or spouses. The relatives of females were more likely to be cousins, sisters, or aunts.

Males were more likely to have an associate degree in nursing as their highest level of nursing education (52.4%). Females were more likely to have a diploma in nursing as their highest level of nursing education (39.3%). More females (9.5%) were currently enrolled in an advanced nursing education program than males (6.3%).
A much higher percentage of males (36.5%) were in the armed forces than females (3.6%). More than one-fourth of the male nurses in the armed forces were married to a nurse in the armed forces.

The male nurse was older when he entered a nursing education program than the female nurse—27.2 years compared to 21.7 years. Although the sources from which males and females received information about nursing education were similar, a much smaller percentage of males (4.4%) received information from high school guidance counselors than females (26.5%). A larger percentage of males (13.2%) received information by researching on their own than females (4.1%).

A much larger percentage of males (44.4%) had a college degree in a field other than nursing than the female subjects (13.1%). Males also were more likely to have had a career prior to nursing (58.7%) than the female subjects (13.1%). Males also had more careers prior to nursing ($M = 1.8$) than females ($M = 1.2$).

A larger percentage of parents of males (12.7% mothers and 15.9% fathers) were employed in service occupations than parents of females (4.8% mothers and 2.4% fathers). A much larger percentage of females (69.0%) consulted with their parents about their decision to enter nursing than males (36.5%).
Male nurses identified helping people, an interest in the medical field, job opportunities, previous health care experiences and salary as the highest ranked factors for choosing nursing as a career. They identified nursing is fulfilling, offers job opportunities, allows them to help people, is flexible and has a good salary as factors for wanting to choose nursing as a career again if given a chance. Those who would not choose nursing as a career again ranked the factors of poor pay, disillusionment, limited advancement, poor hours, stress and disrespect. They identified that nursing has opportunities, is fulfilling, has a good salary, provides security and the fact they are interested in people as factors causing them to recommend nursing as a career. The male nurses ranked disillusionment, poor salary, government interference, poor hours and hard work as factors for not recommending nursing as a career. These factors should be kept in mind when identifying techniques for recruitment and marketing of males into nursing.

Research Question 4

The fourth research question was: What implications do these factors have for the marketing and recruitment of men into the nursing profession? Implications for the marketing and recruitment of men into the nursing profession are addressed in Chapter Five.
Summary

The purpose of this study was to examine if there had been any changes over the last 33 years in factors that influence career choices of males and females who become nurses. Four research questions were developed. The Nurse Characteristics Questionnaire developed by the researcher was mailed to 150 male and 150 female registered nurses in Iowa. A total of 63 male and 84 female registered nurses participated in the study. The data retrieved from this questionnaire were analyzed to answer the research questions.

The first research question asked what factors influence males and females to choose nursing as a career. Based on an analysis of the data, the factors that influence males and females to choose nursing as a career were "to help people", "interest in medical field" and "salary". Most male and female nurses identified they would choose nursing as a career again, would recommend nursing as a career, and did not plan to leave nursing.

The second research question asked what influence the demographic and background characteristics have in influencing males and females to choose nursing as a career. The biggest influence on males and females to choose nursing as a career seems to be being married to a nurse, the age at which the subject decided to be a nurse, having relatives in nursing, having been in the armed forces, and the age at which the subjects entered a nursing
educational program. Other factors influencing males and females to choose nursing as a career include where the subjects received their information about nursing education, if they had a college degree in addition to nursing, if they had a career prior to nursing, the occupations of their mothers and fathers, and the response of their parents when consulted about the subjects’ decision to enter nursing.

The third research question asked what differences or similarities exist between those factors that influence males to choose nursing as a career and those that influence females to choose nursing as a career. The differences were more males were single, married to a nurse, were older when they decided to become a nurse and when they entered a nursing educational program, aspired to obtain a leadership position in nursing, and averaged more relatives in nursing than females. Male nurses also were more likely to have an associate degree in nursing, to have been in the armed forces, to have a college degree other than nursing and a career prior to nursing, and to have parents employed in service occupations than female registered nurses. Male nurses were less likely to have received information about nursing from high school guidance counselors, to be currently enrolled in an advanced nursing educational program, and to have consulted with their parents about their decision to enter nursing than female nurses.
The fourth research question asked what implications these factors have for the marketing and recruitment of men into the nursing profession.

Implications of this study for the marketing and recruitment of men into the nursing profession are addressed in Chapter Five.
CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS AND IMPLICATIONS

The purpose of this study was to examine if there were any changes over the last 33 years in factors that influence career choices of males and females who become registered nurses. This chapter will compare and contrast the findings of this study with the findings of Mannino (1963) and Williams (1973) in their studies. This chapter also will address the limitations of the study, recommendations for further research and implications of the study for advanced nursing practice.

Summary

The purpose of this study was to examine if there were any changes over the last 33 years in factors that influence career choices of males and females who become registered nurses. A structured self-report survey, including 33 fixed alternative and short response questions developed by the researcher and patterned from studies by Mannino (1963) and Williams (1973), was mailed to 150 male and 150 female registered nurse in Iowa. Data that examined background characteristics and demographic information were collected from a total sample of 63 male and 84 female registered nurses.

The first research question asked what factors influence males and females to choose nursing as a career. An analysis of the data revealed the
factors that influence males and females to choose nursing as a career to be very similar. The highest ranked factor for both males and females was "to help people." An interest in the medical field and salary also were highly ranked factors by both male and female registered nurses.

The second research question asked what influence demographic and background characteristics have in influencing males and females to choose nursing as a career. An analysis of the data found the most influential factors for choosing nursing as a career were the age at which the subject decided to become a nurse (males older than females), having relatives who are in nursing, having been in the armed services, and the age at which the subject entered a nursing educational program (males older than females). The analysis also found most subjects received information about nursing education from colleges and universities, with high school guidance counselors providing little information, particularly to males. Having a college degree in a field other than nursing or a career prior to nursing, the subjects' parents working in a professional, paraprofessional, or technical occupation, and the subjects consulting with their parents about their decision to enter nursing also seemed to be influential factors.

The third research question asked what differences or similarities exist between those factors that influence males to choose nursing as a career and
those that influence females to choose nursing as a career. The main differences were more males were single, married to nurses, older when deciding to become a nurse, and aspire to obtain a leadership position. Males averaged more relatives in nursing, were more likely to have an ADN and have been in the armed forces, and were older when they entered a nursing educational program. They were more likely to have college degrees other than nursing, careers prior to nursing, and parents employed in service occupations. Males were less likely than females to be currently enrolled in an advanced nursing educational program, to have received information from a high school guidance counselor, and to have consulted with their parents about their decision to enter nursing.

The fourth research question asked what implications these factors have for the marketing and recruitment of men into the nursing profession. The male nurse of today has changed very little from the male nurse in the studies of Mannino (1963) and Williams (1973). Although the percentage of male nurses in practice today has increased in the past 30 years, the total number of males compared to females in nursing still remains small. It seems apparent that if the number of males in nursing is going to increase significantly, recruiting and marketing efforts to attract males into nursing must change.
Discussion of Findings

The first research question asked what factors influence males and females to choose nursing as a career. An analysis of the data revealed the factors that influence males and females to choose nursing as a career today are similar to the factors that influenced males and females to choose nursing as a career 25 to 35 years ago. The highest ranked factor for both males and females was "to help people." An interest in the medical field, job opportunities, previous health care experience, salary, and job security also were highly ranked factors by both male and female registered nurses. These findings were consistent with the findings of Mannino (1963) and Williams (1973). The most frequently given reason for choosing nursing as a career in Mannino's (1963) study was "because I like people, and enjoy helping them" (p. 186). Other frequently given responses in Mannino's study were they were not financially able to go into medicine, had a desire to improve the status of their lives, wanted to be able to contribute to fulfilling the needs of humanity, and wanted security for themselves and their families.

In Williams (1973) study, 81% of the males indicated they chose nursing because it provides "the opportunity to help people" (p. 522). Other frequently given responses included it provides a steady income; it provides a variety of experiences; the technical and scientific aspects appealed to me; and
it seemed more important than other fields I might have entered. Williams (1973) also found that over three-fourths of the male nursing students considered it important to get ahead in life and two-thirds thought that their chances of getting ahead were better than their male friends who were not in nursing.

This study found that 61.9% of the male nurses would choose nursing as a career again and that 61.9% of the male nurses would recommend nursing as a career. Williams (1973) study indicated that 90% of the male students would probably or definitely choose nursing again. Mannino (1963) found that 73.6% of his sample would recommend nursing as a career, mostly on the basis that "nursing is a good stepping-stone into other fields" (p. 186). Williams (1973) found that two-thirds of his sample would encourage a younger brother or sister to enter nursing if the opportunity was available.

This study found that 17.4% of the male nurses had left or planned to leave the nursing profession in order to go to medical school, earn more money or retire. This was very similar to the findings of Mannino (1963) who indicated that 80.2% of the men in his study remained in nursing or related fields. Williams (1973) stated that 32% of his students indicated they would prefer work in a field of health other than nursing. Of these, almost one-fourth reported they would rather be physicians’ assistants because of the greater
reward, status, and salary. Because Williams (1973) subjects were still students, this may indicate that once men enter the nursing profession, more are likely to stay in it than thought they would prior to entering the profession.

The second research question asked what influence the demographic and background characteristics have in influencing males and females to choose nursing as a career. An analysis of the data found the most influential factors for choosing nursing as a career were the age at which the subject decided to become a nurse, if the subject had relatives in nursing, if the subject had been in the armed services, and the age at which the subject entered a nursing educational program. The analysis also found where or from whom the subjects received information about nursing education, if the subject had a college degree in a field other than nursing or a career prior to nursing, the occupations of the subjects' parents, and if the subjects consulted with their parents about their decision to enter nursing to be influential factors. These findings also were consistent with the findings of Mannino (1963) and Williams (1973) indicating that these factors had changed very little in the last 25 to 35 years. Further discussion of these factors occurs with research question three.

The third research question asked what differences or similarities exist between those factors that influence males to choose nursing as a career and
those that influence females to choose nursing as a career. The findings again were consistent with the findings of Mannino (1963) and Williams (1973). The differences that existed between those factors that influence males to choose nursing as a career and those that influence females to choose nursing as a career included more males were married to nurses, were older when deciding to become nurses, and aspired to obtain leadership positions. The majority of the male nurses (79.4%) in this study were married as were those in the studies of Mannino (1963) (70.8%) and Williams’ (1973) (58%) and the percentage of male nurses married to nurses (42.9%) in this study was similar to the percentages found by the other researchers. The male nurses in this study decided to become nurses at a mean average age of 26.71 years, similar to the findings of Williams (1973) that found the majority of his subjects first considered becoming nurses after graduation from high school. The most recent nursing positions cited by the male nurses in this study included emergency room, intensive and coronary care, and the operating room. This was comparable to the preferred nursing specialty areas in Williams (1973) study.

This study also found that males averaged more relatives in nursing, were more likely to have an ADN, were more likely to have been in the armed forces, and were older when they entered a nursing educational program. They
were more likely to have college degrees other than nursing, careers prior to nursing, and to have parents employed in service occupations. This study found that 55.6% of the male nurses had relatives in nursing, similar to the findings by Mannino (1963). Williams (1973) found that less than half the students had relatives in nursing or allied health fields. In light of the fact that 32% of Williams' (1973) students indicated they would prefer work in a field of health other than nursing, this may indicate that having relatives in nursing is an influence on males remaining in nursing as well as entering nursing.

The highest level of nursing education obtained by the male nurses in this study revealed 52.4% had obtained an associate degree in nursing. Mannino (1963) found that 73% of the males in his study had education beyond the basic nursing program. Less than 20% of Williams (1973) students had entered a diploma or associate degree before pursuing a baccalaureate degree. Males may pursue nursing education beyond the diploma level in order to be in a more liberal environment. This allows them to be exposed to other male students and to courses outside the field of nursing.

This study found that 36.5% of the male nurses are (or were) in the armed services, with the majority being in the Army. Mannino (1963) found a much higher percentage (69.3%) of males to be in the armed forces with the majority in the Army and Air Force. In Williams (1973) study, 41% of the
male students thought they might make military nursing a career. The lower numbers of males currently in the military may be reflective of selective service no longer being mandatory and a shift of priorities of today’s males away from the armed forces and into other fields.

The average age of men entering a nursing educational program for this study was 27.2 years. Mannino (1963) found the median age for males entering a nursing program to be 21.15 years. Williams (1973) found the median age of his male students to be 23.4 years. People need to be socialized into a career. They will leave jobs they do not like and find something they prefer. Men often enter nursing as a second career. The male of today is possibly staying with his first career longer before deciding to enter the nursing profession. The older age of the male entering a nursing educational program today may also be indicative of the increased number of non-traditional students in schools of higher education.

This study found that 58.7% of the males had a career before nursing, with 23% indicating their career was in health related fields. This was very comparable to Mannino’s (1963) finding that a total of 61.4% of the males in his study indicated they had a previous occupation before entering nursing. Williams (1973) indicated that previous employment in the health field was common for his male students. This indicates that nursing was and is still a
second career choice for many men but the interest in the health profession was often present in the first career choice.

The most common occupation of the male nurses' mothers found in this study was homemaker (41.3%). In Mannino's (1963) study, 393 mothers were listed as housewives. The study by this researcher found the most common occupation for the fathers was farming (15.9%). Mannino (1963) also found the most common occupation for the fathers was farming with the second most common occupation to be coal mining. Williams (1973) found that over 50% of the fathers were skilled craftsmen, managerial or white collar workers. He did not address the mothers of the subjects. These findings seem to indicate a desire for upward mobility and increased social class on the part of the males who enter nursing.

This study also found that males were less likely than females to be currently enrolled in an advanced nursing educational program, to have received information from a high school guidance counselor, and to have consulted with their parents about their decision to enter nursing. This again is consistent with the findings of Mannino (1963) and Williams (1973). Only four male nurses in this study were currently working toward an advanced degree in nursing. Mannino (1963) found that 16% of the males in his study were currently enrolled in baccalaureate degree programs and 6% in master degree
programs. Less than 20% of Williams (1973) students had entered a diploma or associate degree program before pursuing baccalaureate preparation. Because many of the males had a college degree prior to entering the nursing profession, and entered the nursing profession at a later age, it is logical that the male is less likely to pursue further education once he enters nursing than his female counterpart.

This study found that high school guidance counselors had given information to only 4.4% of the male nurses. Williams (1973) also found high school guidance counselors play a very insignificant role. This study found that 36.5% of the male nurses had consulted with their parents about their decision to enter nursing. Williams (1973) found that over 25% of his students indicated that their parents had played no part in helping with their career choice, but nearly 50% consulted their parents about their decision. High school counselors seem to be uninformed about the advantages and potential that a nursing education has to offer, particularly to males. The low number of males consulting with their parents may indicate a fear that their decision to enter nursing may not be supported by their parents. The older male may no longer have parents with which to consult.

The fourth research question asked what implications these factors have for the marketing and recruitment of men into the nursing profession. The
male nurse of today has changed very little from the male nurse in the studies of Mannino (1963) and Williams (1973). Because the percentage of male nurses in practice today has increased very little in the past 30 years, it seems apparent that recruiting and marketing efforts to attract males into nursing must change because the current efforts do not seem to be working. Because there are many similarities that exist between those factors that influence males to choose nursing as a career and those that influence females to choose nursing as a career, the same efforts might also be appropriate for the recruitment of females.

This study indicated that 69.8% of the male nurses believed that the number of men in nursing would increase in the future. In Williams (1973) study, 90% of the males thought the number of men in nursing would increase in the future. If the number of men in nursing is to increase in the future, the demographic and background characteristics of the male nurse of today which were revealed in this study must be considered.

Because the male nurse is looking for upward mobility and a higher social status than that of his parents, a career in nursing must be presented as an appealing and enjoyable professional occupation. The large number of males from small towns indicates that recruitment should be from rural, as well as urban areas. Because nursing for males is often a second career choice
and the decision to enter nursing is made later in life, many years of potential recruitment of males are lost. Non-traditional career choice possibilities, such as nursing, need to be introduced no later than junior high school, preferably at the grade school level because future roles are shaped at this age. Active targeting of this age group can be done through use of the media including magazines appealing to men and boys, and advertising on the radio. Television needs to portray the male nurse as an integral part of the health care team.

Recruitment of males should be a collaborative effort of nursing education and nursing practice. Nurse educators need to take a more active role in marketing the nursing profession and their schools of nursing. Practicing nurses also must become recruiters. They can appeal to the male nurse’s desire to help people by telling potential students how they themselves were able to enhance the quality of life of others. Because other nurses and nursing students are influential in the career choice of males, males need to have an opportunity to be exposed to other nurses or nursing students. Being able to spend a day with a nurse or nursing educator may be helpful in viewing nursing as an enjoyable occupation. Because the specialty areas of choice for the male may differ from the female, the areas that appeal to males should be emphasized.
Many male nurses were previously employed in the health care field. An active effort should be made to recruit men currently in allied health professions or those with health care experience. The recruiter, or employment counselor, needs to focus on the desirable career attributes of nursing, such as the well-being of others and caring. Recruitment efforts also need to be directed toward men who view nursing as an interim step to other health-related professions such as medicine. These efforts need to focus on the advantages nursing now has to offer, such as improved pay scales and possibilities for advancement, in order to deter men from entering other professions in order to find these attributes. Nursing should be illustrated as an attractive profession with job opportunities, security, diversity, and flexibility.

The absence of male role models may influence the career choice of men. According to functionalist theory, actors within social systems share expectations for behaviors within the system, and these expectations constitute norms for conduct (Borgatta & Borgatta, 1992). Marketing needs to be done in an androgynous manner that does not perpetuate the image of nurses as only female thereby establishing nursing as a norm for conduct for males. Male nurse recruiters and male nursing faculty need to be visible and available to visit with potential male nursing students as well as the male worker displaced from his current job.
One of the barriers to the recruitment of men into nursing seems to be the lack of encouragement from high school counselors even though the male may have already decided that he would like to pursue nursing as a career. High school counselors do not understand how intellectually demanding nursing curricula are. They identify populations for nursing that are not academically prepared to complete a nursing education program (Boughn, 1994). High school counselors should be informed about nursing and encouraged to promote nursing as a profession for males as well as females. Nursing faculties should invite elementary and secondary school personnel, including counselors, to visit their campuses. Because the male nurse is a family man, family members should also be included in the recruitment process so they can better understand the profession and serve as encouraging forces for the potential male nurse.

This study supports the theoretical framework of social role theory. Symbolic interactionism focuses on working roles with an emphasis on the way people take the role of others, construct their own roles, anticipate the response of others to their roles, and finally play at their particular role (Marshall, 1994). The male nurse is taking part in this process. The socialization and personality development occur through his participation in increasingly diverse and complex social roles. He must be able to integrate
diverse roles in order to maintain a sense of personal continuity. Occupation is a major life role. With each new role the individual's self-definition changes and the potential for influencing the world increases. The occupational role may include hazardous working conditions and continuous exposure to stress (Newman & Newman, 1979). The male nurse must decide if these vulnerabilities are tolerable in light of compensating awards. Bush (1976) found that men who decided to enter nursing, had met at least one of two conditions: the men had had an associated work experience or the prospective student had sought work in the hospital to confirm his choice. This held true in this study.

Limitations of the Study

There are always limitations to a study conducted with a structured self-report tool. The first limitation of the study was the sample. It was small, homogenous, and limited to active registered nurses in a mainly rural, midwestern state. Due to this limitation, the findings can not be generalized to minority population groups or to the total population of registered nurses. In addition, the respondents who returned surveys may not be representative of the total population of registered nurses but only those who had time, enjoyed participating in research, or had a need to address the topic being studied.
The nature of the topic of the questionnaire may have been another limitation of the study. If the nurses were not interested in the recruitment and marketing of registered nurses, they may have chosen not to fill out the questionnaire. The results of the questionnaire also are limited to the extent that the respondents were willing to reveal information about their perceptions of the nursing profession.

Another limitation of the study is the questionnaire itself. It was designed so that the easier fixed alternative questions were first, but the order of the questions was somewhat random, limited by the order of responses from the studies by Mannino (1963) and Williams (1973). This may have been somewhat confusing to the participants. Because the subjects were allowed to skip any question they were not comfortable answering, not all questions were answered. The length of the tool, four pages, and the time to respond to the questions, approximately twenty minutes, also may have been limitations. Another limitation of the tool was the possible lack of validity and reliability. Content validity was established by three nurse educators who provided input into revision of the tool.

Another limitation of the study was the wording of the questions on the questionnaire. Although care was taken to word questions clearly, simply, and unambiguously, the subjects may have had problems identifying what the
questions were trying to ask or what responses were expected of them. They may have tried to respond according to what they thought the researcher desired (the Hawthorne effect). There also was no control over who actually answered the questionnaires. The tabulation of the short response questions is unavoidably subjective because of the possibility of inappropriate categorization resulting from misinterpretation of responses (the halo effect). Also, the responses could vary with the subjects frame of mind and what kind of day they had had that day (novelty effects).

Recommendations for Future Research

The first recommendation for further study is replication of this study. The sample needs to be larger, more heterogenous, and expanded beyond the boundaries of this rural, midwestern state. Replications are needed to establish the validity and generalizability of previous findings (Polit & Hungler, 1991).

A second recommendation for further research would be revisions in the tool used for the study. Because it was important that all categories of data addressed in the studies by Mannino (1963) and Williams (1973) be addressed in this study, it would be very difficult to shorten the tool either in length or the time required to administer. Some of the questions, however, could be rearranged for a more logical progression from beginning to end. In addition, several questions need to be worded more clearly to avoid confusion on the
part of the subject and difficulty of interpretation for the researcher. The questions asking for the subjects' most recent nursing position and the position they aspired to obtain need to be clarified so that answers can be categorized into both level of position (such as administrator, staff nurse, or ARNP) and specialty area of interest (such as operating room, critical care, or research).

Another revision to the questionnaire would be to add a question to determine if the subject is employed full or part time in order to make the answer to the question regarding most recent annual nursing salary more meaningful. Rather than asking the subjects to estimate their annual total income of the family with which they resided, which varies according to the subject’s age, it might be beneficial to ask the income class, such as middle class, of the family with which the subjects grew up. Any questions regarding the career or occupation of the subjects or their parents should offer career categories from which to select rather than asking the subject to fill in the blank. The question regarding marital status should be rewritten to determine the subjects’ marital status at the time they entered a nursing educational program.

Based on the findings of this study, as well as the studies by Mannino (1963) and Williams (1973), the following research studies should be considered: (a) A qualitative study investigating the motivational factors
causing older men to enter nursing; (b) A comparative analysis of perceptions of a nursing career held by male elementary and secondary school students; (c) A qualitative study investigating recruitment and marketing techniques for nursing that appeal to men; and (d) A study investigating the factors that influence men to remain in nursing. Studies need to continue to use female samples to compare and contrast the responses of male subjects. This should be done to help determine similarities and differences between male and female nurses for recruitment purposes, and because studies about male nurses that include female samples are few in number.

Implications for Advanced Nursing Practice

This study has implications for the advanced nursing practice roles of research, practice, education, and administration. Recommendations for nursing research have already been made. Further research will contribute to nursing's body of knowledge and raise awareness of the characteristics and recruitment needs of the man in nursing. The advanced registered nurse practitioner (ARNP) in the practice setting needs to be a role model for the prospective male nurse. This nurse can actively recruit the male nurse by inviting him to the clinical setting to observe the role of the nurse. He will be able to see that the patient can benefit from the caring a male nurse can give. The nurse in practice can also go to the work place or school of the
prospective male nurse. The school nurse is at particular advantage in this area and can be an asset in the recruitment of school-age males.

The ARNP in the educational setting is at particular advantage to benefit from the results of this study. In regard to marketing, the schools of nursing must employ male nurse recruiters and male faculty to serve as role models and mentors for the male student. Current male students can be valuable in filling these roles if male employees are not available. Prospective male students should be invited to visit the schools. Nursing should be taught in a non-sexist way—avoiding pictures with only female nurses and avoiding the use of "she" when referring to nurses. The older male in other health-related fields must be targeted.

Nursing administration is responsible for seeing that qualified applicants are hired to fill vacancies. Although preferential treatment is not to be given, the male nurse should be considered on equal status with the female nurse. The nurse administrator should give the male nurse credit for the ability to display caring to the patient. Nurse administrators can also assure that the male and female nurses are shown equal respect by their colleagues.

The results of this study were very congruent with the results of the previous studies of Mannino (1963) and Williams (1973). The male nurse of today is a professional, raised in an rural area, with an equal or higher
socioeconomic class than his parents. He has relatives that are in nursing, a
wife and a family. The male nurse is older, first thought about nursing at a
later age, earns a higher salary, and supports nursing to a greater extent, as
indicated by belonging to nursing organizations and subscribing to nursing
journals, than his female counterpart. Although many male nurses are staff
nurses at this time, more male nurses aspire to obtain management and ARNP
positions than do females. Many persons and organizations were influential in
providing information to the male regarding nursing. Parents, however, played
a significant role. High school guidance counselors played an insignificant role
in the recruitment of males into nursing.

The male nurse wants to help people, is interested in the health field,
and influenced by job opportunities, salary, security, and flexibility offered by
nursing. The few who would leave nursing or not choose it as a career again
would do so because they are disillusioned, and because of poor pay, limited
opportunities for advancement, poor hours, stress, and disrespect. Nursing is a
second career choice for men, with many having been in the health care field
previously. He would choose nursing as a career again if given a chance and
plans to remain in the nursing profession.

The background characteristics and demographic data of the male nurse
of today have changed very little from those of the male nurse in the studies of
Mannino (1963) and Williams (1973). Because the percentage of male nurses in practice today has increased very little in the past thirty years, those wishing to increase recruitment and marketing efforts to attract males into nursing should consider the results of this study. The recruitment and marketing strategies discussed previously should help increase the market share of males in nursing. It should be pointed out that these strategies also will be effective in the future recruitment of females.

Nursing is a career that people like to do, are interested in, and are good at. Potential nurses must consider their need for approval, ability to delay gratification, and personal value orientation when considering this occupation. "No one race, gender, or ethnic group has a monopoly on the qualities of intelligence, scientific competence, imagination, empathy, tenderness, concern for others, or motor skill ability. To state otherwise is to deny reality" (Christman, 1988, p. 75).
REFERENCES


Nurse Characteristics Questionnaire

Please complete the following information by filling in the blank or marking an "X" by the best answer. Select only one answer unless asked to select more than one. The questionnaire will take about twenty minutes of your time. You may skip any question you might be uncomfortable answering.

Date__________________________

1. Sex: □ Male □ Female

2. Age: ________________ years

3. Race: □ Caucasian □ African American □ Hispanic American □ Asian American □ Native American Other (please specify) __________________________

4. Religion: __________________________

5. Marital status: □ Married □ Divorced □ Single □ Widowed

6. Are (were) you married to a nurse? □ Yes □ No

7. How many children do you have? __________________________

8. At what age did you decide to become a nurse? ____________ years

9. How many years have you been in nursing? (Enter the number of years to the nearest half year.) ____________ years

10. What is (was) your most recent nursing position?
________________________

11. What position do you aspire to obtain?
________________________

12. What is (was) your most recent annual nursing salary? $____________
13. Do you subscribe to a nursing journal? □ Yes □ No
   If yes, what journals? (Please list):
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

14. Do you belong to a nursing organization? □ Yes □ No
   If yes, what organizations? (Please list):
   __________________________________________________________
   __________________________________________________________

15. Do you have relatives in nursing? □ Yes □ No
   If yes, list relationships and numbers:
   __________________________________________________________
   __________________________________________________________

16. What is your highest level of nursing education?
    □ Diploma in Nursing
    □ Associate Degree in Nursing
    □ Baccalaureate Degree in Nursing
    □ Master’s Degree in Nursing
    □ Doctorate in Nursing

17. Are you currently enrolled in an advanced nursing education program? □ Yes □ No
    If yes, what area?
    □ Baccalaureate Degree
    □ Master’s Degree
    □ Doctorate
    __________________________________________________________

18. Are (were) you in the armed forces? □ Yes □ No
    If yes, what branch?
    __________________________________________________________
    What is (was) your highest rank?
    __________________________________________________________
    Are (were) you an armed forces nurse? □ Yes □ No

19. How old were you when you entered a nursing educational program?
    __________ years
20. Where, or from whom, did you receive your information about nursing education?

__________________________________________________________________________

21. Do you have a college degree in a field in addition to nursing?
   □ Yes  □ No
   If yes, indicate the field and major:

__________________________________________________________________________

22. Did you have a career(s) prior to nursing? □ Yes   □ No
   If yes, please list:

__________________________________________________________________________  
__________________________________________________________________________

23. What is (was) the occupation of your mother? ________________________________

24. What is (was) the occupation of your father? ________________________________

25. Did you consult with your parents about your decision to enter nursing?  
   □ Yes   □ No
   If yes, with which parent did you consult? _________________________________
   What was their response? ________________________________________________

Was their response important to you?________________________________________

26. What would you estimate to be the annual total income of the family with which 
   you grew up? $________________________

27. What was the population of the area where you grew up? 
   □ Farm
   □ Small town (< 2500)
   □ Small city (2500 - 14,999)
   □ Large city (15,000 - 99,999)
   □ Suburb (within 15 miles of a metro area)
   □ Metro area (100,000 or more)

28. Would you consider your grades while in school to be:
   □ Excellent  □ Average
   □ Above average □ Below average

29. Do you think the number of men in nursing will increase in the future? 
   □ Yes   □ No
   Why or why not?
Questions 30 - 33 require short responses. Please list all information that you perceive is important. You may continue your answers the back of this page if more space is needed.

30. What factors influenced you to choose nursing as a career?

31. If given a choice, would you choose nursing as a career again?
   □ Yes  □ No
   Why or why not?

32. Would you recommend nursing as a career?
   □ Yes  □ No
   Why or why not?

33. Have you or do you plan to leave the nursing profession?
   □ Yes  □ No
   Why or why not?

You have now completed the questionnaire. Thank you for your participation!
APPENDIX B

COVER LETTER
Dear Registered Nurse:

You are invited to participate in a study comparing the characteristics of males and females who select nursing as a career. As a registered nurse who has seen several shortages and gluts of professional nurses, I am concerned about the availability of registered nurses in the future. I am looking at these characteristics as a means of increasing the future recruitment and marketing of registered nurses.

The purpose of this study is to analyze the characteristics of males and females who select nursing as a career and to use the data for the purpose of increasing the recruitment and marketing of persons into the nursing profession. I am conducting this study in connection with my Master's of Science in Nursing Degree requirements at Drake University in Des Moines, Iowa, under the supervision of Sandra Sellers, Ph.D., R.N., Drake University, 515-271-2754.

Because you are a registered nurse in the state of Iowa, you have been randomly selected to be included in this study. I would greatly appreciate your participation in the completion of the attached questionnaire. It should take approximately twenty minutes of your time. After completion of the questionnaire, please return it by March 1, 1997 in the stamped, self-addressed envelope. By completing the questionnaire you will be making a valuable contribution to the future of nursing by increasing the potential labor pool.

Participation in this study is voluntary. If you find a question you are not comfortable answering, you are free to skip that question and continue with the next questions. Your completion of the questionnaire will be considered your consent to provide data for the study. In order to preserve your anonymity, please do not place your name on the questionnaire. The information obtained will be summarized and reported as group data only. No names or individuals will be identified. On completion of this study, all questionnaires will be destroyed.

If you would like a summary of the findings of this study, a copy can be obtained by writing me at the address below or calling me at 515-362-6635. Thank you so much for your participation.

Sincerely,

Nancy J. Tremmel  B.S.N., R.N.
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Ankeny, Iowa 50021
515-362-6635