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THE MAN IN NURSING: RELATIONSHIPS BETWEEN SEX-TYPED PERCEPTIONS AND LOCUS OF CONTROL

The University of Oklahoma

PH.D. 1981

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THE UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

THE MAN IN NURSING: RELATIONSHIPS BETWEEN SEX-TYPED

PERCEPTIONS AND LOCUS OF CONTROL

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

BARBARA JOY HOLTZCLAW

Norman, Oklahoma

1981

THE MAN IN NURSING: RELATIONSHIPS BETWEEN SEX-TYPED PERCEPTIONS AND LOCUS OF CONTROL

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ABSTRACT

THE MAN IN NURSING: RELATIONSHIPS BETWEEN SEX-TYPED

PERCEPTIONS AND LOCUS OF CONTROL

By: Barbara J. Holtzclaw

Major Professor: Lloyd J. Korhonen, Ph.D.

Because the profession of nursing has been sex-typed by society as feminine, there has been considerable underutilization of men in its ranks. Associated with this is a general avoidance of the field by men, with males constituting only slightly more than two percent of the nursing population.

Based upon Bandura's <u>social learning theory</u>, the theoretical framework of the study emphasized the mutual interaction of social shaping and reinforcements with cognitive and emotional factors in determining a man's view of the sex-appropriateness of an occupation. Drawing from Bandura's model of <u>reciprocal determinism</u>, it was expected that a man's selection of nursing as a career was in part related to his sex-role socialization; as well as his ability to cognitively and emotionally adapt his view of the profession.

The study was designed to investigate factors that influence the man nurse's ability to negotiate role strain and possible status contradiction exerted by a feminine sextyped profession. The following research questions were examined: Are men who choose nursing as a career less

traditionally sex-typed and more androgynous than non-nurse men or women nurses? Is androgyny in men nurses associated with a more internal locus of control? Do traditionally sex-typed men nurses avoid role conflict by aligning their occupational role perceptions with their own sex-typed self-perceptions?

The study sample consisted of twenty-six men and twenty-six women nurses, randomly selected from graduates of a large baccalaureate nursing program. Four study instruments were used: a biographical questionnaire, the Bem Sex-Role Inventory, the Ideal Nurse Survey (an adaptation of the Bem Inventory), and the Rotter I-E Locus of Control Scale.

In a comparison with a large normative sample of nonnurse men, the expectation that men nurses would be more androgynous was not supported. Men nurses were not found more
androgynous than women nurses, although women nurses tended
to be more sex-typed. No differences were found between locus
of control perceptions of androgynous subjects and those of
other sex-role identities. Subjects of both genders and of
various sex-role categories tended to view the nursing role as
congruent with their own sex-typed self-perceptions.

While androgynous and undifferentiated self-perceptions appear to facilitate approach of men to a feminine sex-typed profession, the concept of androgyny needs more investigation before its influence on nurse-effectiveness can be established.

THE MAN IN NURSING: RELATIONSHIPS BETWEEN SEX-TYPED PERCEPTIONS AND LOCUS OF CONTROL

CHAPTER I

INTRODUCTION

Several fields among the health professions in America have been traditionally sex-segregated. Nursing, with approximately 98% of its membership female, provides a notable example. Largely the result of this country's earlier history of male domination and female dependency, the health occupations open to women have been subordinated and auxiliary to the medical male superior. Affirmative action and legislation of recent years have barely made an inroad into the pervasive sexism in occupations; for women in maledominated professions are still found at the lowest levels, playing delegated or inferior roles (Bullough & Bullough, 1975; Epstein, 1970; Roeske, 1976).

Sex-typing of a particular profession poses a serious threat to the utilization of human resources of both sexes.

It not only "channels" qualified individuals of the lower status sex away from high valued jobs, it devalues the

professions that are stereotpyically associated with the lower status sex. In short, the profession of nursing, once significantly occupied by men (Jamieson, Sewall, & Suhrie, 1966, p. 363), has been devalued because it is now predomimantly held by women (Etzkowitz, 1971; Segal, 1962). The paucity of male enrollment in schools of nursing has been attributed, in part, to the sex-typing of nursing as a feminine occupation (Bush, 1976; Fottler, 1976; Segal, 1962).

The emergence of an emancipating trend in society and education has been cited by researchers as a possible change agent in overcoming occupational sex-typing (Schoenmaker & Radosevich, 1976). The social upheaval of the 1960's launched many new idealogies and brought into question old traditions and status barriers. The counterculture gave emphasis to sensuality, expressiveness and humanistic concern for both men and women as they redefined traditional gender roles (Chafetz, 1978, p. 230). Indeed a recent study of attitudes of female classmates toward male nursing students indicates a vast difference from the sex-typed responses in a similar study done a decade ago (Fottler, 1976; Segal, 1962).

The trend that has been found particularly effective toward overcoming stereotypic attitudes about the sexappropriateness of occupations, is the encouragement of individualism and adaptability. The individual who can vary behaviors and responses to meet changing situations, and do

well in either masculine or feminine stereotyped activities, is less likely to reject or feel uncomfortable in a sextyped profession. Such an individual is termed androgynous by Bem and her associates (1974). Androgyny is the term used to describe behavior that is not constrained or confined by prevailing attitudes of sex-appropriateness (Kaplan, 1976, p. 354). A man who is androgynous in his perceptions of himself and perceived no "status contradiction" in his chosen occupation despite its feminine sex-typing by society, would seem well suited to the "difficult road ahead" described by Kalisch and Kalisch (1978, p. 581):

The strength of the link between women and nursing was perhaps one of the strongest in any occupation and consequently would only be overcome slowly as increasing numbers of men would undergo the unique interpersonal and societal demands that all phases of nursing education and service would make upon their egos.

Background of the Problem

The relative comfort or discomfort of an individual in performing sex-typed tasks and activities has been explored by social psychologists and educators alike (Bem & Lenney, 1976; Hartup & Moore, 1963; Minuchin, 1975). In social learning theory, sex-typed behaviors are those which an individual considers appropriate for only males or for only females. Such perceptions are learned throughout a lifetime by observing that the consequences differ from certain behaviors depending upon the sex of the performer. Sex-typed behaviors typically are valued and earn rewards only

if they are performed by the appropriate sex. Once these sex-typed behavior patterns are learned, they do not necessarily require outside reinforcement to enforce compliance. The person will self-administer consequences that reward sex-appropriate and reject cross-sex behavior (Mischel, 1966, p. 56).

The type of nursing practiced in the first half of this century has promoted an image of female sex-typed behaviors: submission to authority, compassion and gentleness, and a willingness to perform menial repetitious tasks. feminine sex-typed woman not only found nursing suitable to role expectations, but this nurse's willingness to perform a "helping mission" without complaint provided a natural counterpart to the male-dominated medical profession. after Florence Nightingale's school in London, nursing schools in America reflected Victorian constraints that were to last from the 1870's to well into the 1960's. The socialization of nursing students was remarkably similar across the nation. Fach school promoting the ideal of "woman as lady", emphasized Nightingale's insistence that nurses should be "clean, chaste, quiet, and religious" (Bullough, 1977, p. 310). Schools were tightly supervised and cloistered with a dedication to "raise a plentiful supply of women nurses - respectful, obedient, cheerful, submissive, hard-working, loyal, passive, and religious" (Kalisch & Kalisch, 1978, p. 141). Nursing's background of submission

and passivity has been called an accurate reflection of the stereotyped role of women. The norms and values of the profession as well as the manipulative game-playing with the male medical authority figure have been cited as examples of characteristics that have stereotyped women at large (Bullough, 1977, p. 309; Stein, 1968). The "ministering angel" image, while held in regard as a suitable female role, did little to upgrade nursing as a true profession. So well ingrained is society's perception of nurses as missionaries, that demands for increased status and economic security by nurses in the mid-1960's were met by public responses of shock and disbelief (Schulman, 1972, p. 228).

The historical association of nursing care with women is relatively recent. Early records of Greek and Roman times relate that "tent companions" that administered nursing care on the battlefield were men. Aesculapian temple attendants of the ill were also men (Bullough & Bullough, 1969, pp. 21-29). During the medieval period, all-male monastic nursing orders were the rule. Feudal knights assumed nursing duties in battle settings and often combined the roles of warrior and nurse (Jamieson, Sewall, & Suhrie, 1966, p. 96). Only in the late Middle Ages were women represented in any significant degree in institutional nursing care outside the home, and these were members of religious orders (Bullouth, 1977, p. 309). The illustrious contribution of the Knights Hospitallers in the Crusades

and the significant occupancy of men in nursing well into the 19th century, was soon to be lost in society's recollection. The advent of "modern nursing" followed the introduction of women in battlefield nursing during the Crimean War. Florence Nightingale and her nursing personnel demonstrated that women could provide exemplary care and relief of suffering despite the unsavory or unpleasant settings of war. Following the war, Nightingale began her famous school that merged two prior types of nursing formerly done by women: religious sisterhood and secular servitude. While Nightingale brought an aura of religiousness and respectability to secular nursing, the stereotyping of the nursing profession as feminine became firmly embedded in societal perception (Bullough, 1977, p. 309).

By the turn of the century, men who were nurses suffered harassment and were suspected as "unfit for any other occupation." Kalisch and Kalisch quote from a 1914 manual on hospital administration: "There is no doubt that there is something more virile, more substantial, and certainly less finicky in the male nurse than in the female." However, the manual goes on, the male nurse:

Has usually some overpowering failing, some inherent weakness that forbids his success in any permanent line of human endeavor. In other words, the male nurse has been nearly always "a failure." Many times he has become a periodical drunkard. Sometimes he has been a bright young businessman or mechanic or clerk whose intemperate habits have brought him to the hospital, and, after repeated trials and repeated

failures, he has found that his only safety lies in shutting himself out from the world, and subjecting himself to the discipline of the hospital or the eleemosynary institution.

The account describes the male nurse as a "composite of drunkenness and genius" who is subject to unpredictable spells of weakness and poor character (Kalisch & Kalisch, 1978, p. 574).

This deteriorated image of the male nurse was evident in both World War I and II, when men who were nurses were drafted into the service, but denied the opportunity to practice nursing. Men nurses who volunteered or were drafted were given no official status. They were inducted as privates in the Army or pharmacist mates in the Navy, and were frequently used in non-health related jobs (Kalisch & Kalisch, 1978, pp. 576-579). It was not until 1955 that a bill was passed to commission men nurses in the military services.

The influx of men into military nursing was ironic, in light of the severe shortage of nurses suffered by the armed forces during both World Wars. By 1964 there were 695 commissioned men nurses in the Army and Air Force Nurse Corps. This number exceeded the number of men who graduated from nursing schools during the period from 1945 to 1965 (Kalisch & Kalisch, 1978, p. 580; Spalding & Notter, 1965, p. 95). The trend has continued, until today the proportion of men nurses in the Army, Navy, and Air Force averages around 25% ("Military Nurses," 1980).

Although the nursing profession has remained sex-typed in the perception of the public, the evolving role expectations have become diverse and often in conflict. formance of many of the nurturing, comforting, housekeeping and feeding tasks of nursing are sex-typed as feminine, while the need for a measure of detachment, a demeanor of efficiency and the ability to perform responsible problem-solving are traditionally sex-typed as masculine. The collateral existence of "mother surrogate" and scientific healer roles provide some degree of social confusion and role strain for women as well as men who enter nursing (Davis & Olesen, 1963; Rohweder, 1969; Schulman, 1972, p. 233). The needed characteristics for "today's nurse" draw from those commonly associated with both feminine and masculine sex-roles. more adaptable the man or woman is in performing a wide range of activities beyond those stereotyped as sexappropriate, the better suited the person will be for the changing nature of nursing roles.

A plea for androgyny has become evident in recent years in the education of children. There have been major efforts in literature and media for children to replace the sex-typed caste system portrayed in traditional books and films with androgynous messages that encourage "full personhood" and fulfillment of every individual (Burnett, Mendoza, & Secunda, 1975; Thomas, 1973). Androgynous persons have been found in studies to show greater behavioral flexibility,

higher self esteem, and less fear of success than those who are sex-typed in their preceptions (Major, 1979; Spence, Helmreich, & Stapp, 1975).

The case for androgyny in nursing has, at present, been undeveloped. Only recently has the consciousness of its members been raised to challenge the pervasive sexism that confronts the profession (Bullough & Bullough, 1975; Cleland, 1971). There is increasing awareness that the liberation of women in this country contains many elements of liberation of men as well. In the case of nursing sexism, the problem is circular: feminine sex-typing has turned away men while promoting the passivity that keeps the profession helpless. There is a need for more exploration of the androgynous individual and the associated characteristics that may be related to more effective nursing behaviors. There is a need for evidence that androgyny in nursing is significantly associated with greater adaptability and healthy behavior. Such information would provide further support for the promotion of androgyny in early formative years of childhood. In nursing curricula and teaching methodology, more attention to creating comfort behavior may result from such findings. Such knowledge can be useful to nursing students, practitioners, and teachers who are attempting to help the profession find a new identity. States one writer, "do we have any idea how many men might opt for nursing careers if our culture viewed its work as

something other than feminine?" (Schaefer, 1972). Androgyny offers a third alternative to femininity and masculinity that one social scientist claims is more humanistic. She further states that this view involves learning and unlearning of new and old attitudes that can be chosen by the individual (Chafetz, 1978, p. 258). Rather than an abdication of masculine and feminine behaviors, androgyny overcomes the idea that these characteristics belong exclusively to one sex or another. The decision for a nurse to be nurturant, compassionate, assertive, independent or critical would be appropriate to the situation rather than his or her sex.

Statement of the Problem

Nursing has been sex-typed by society as a femaleappropriate occupation, a factor that is likely to create
avoidance in strongly masculine sex-typed males. The literature suggests that although sex-typing is learned by children early in life, boys are more strongly sex-typed than are
girls (Minuchin, 1975; Nemerowicz, 1979, p. 159). So
strongly is sex-typing applied to social shaping, that few
males are likely to ever consider nursing as an occupational
option until they are young adults. Despite these factors,
men do continue to enter nursing and somehow negotiate any
sex-typed incongruencies between their perceptions of "self"
and their occupational role.

What characteristics are related to the sex-typed role negotiation of men in nursing? Do men who enter nursing differ from the strongly sex-typed males found in the general population, estimated to contain only 33% androgynous men? Is androgyny in men nurses associated with greater control perceptions about their destiny? Do men nurses who are not androgynous avoid role conflict by perceiving their occupational role as congruent with their own sex-type? Does androgyny typify men nurses more than it does their female counterparts in the profession?

Hypotheses

The hypotheses to be tested in this study, were generated from four research questions. Each research question is followed by its related hypothesis:

- 1. Have men in nursing resisted or overcome traditional sex-typing?
 - H₁ Men in Nursing will reveal an androgynous sextype.
- 2. Do men in nursing bear out previous studies that show correlation between an internal locus of control and androgyny?
 - H₂ Where sex-type is androgynous, there will be a more internal locus of control.
- 3. Do men nurses avoid sex-typed role conflict by aligning occupational role perceptions to match their own selfperceptions?

- H₃ Where men reveal strong sex-typing, they will hold sex-typed occupational role perceptions that are congruent with their self-perceptions.
- 4. Because nursing is sex-typed as feminine, will more women in the profession be feminine sex-typed, as opposed to the men who have crossed over traditional lines?
 H₄ Men nurses will reveal more androgynous self-perceptions than will women nurses.

Assumptions Underlying the Study

- Individuals differ on several sex-role characteristics which are measurable.
- 2. Masculinity and femininity are not opposite poles of a single continuum, rather they are separate but not mutually exclusive sex-role perceptions.
- 3. The traditional division of men and women's work or family roles is a function of, and is perpetuated by, perceptions of sex-role appropriateness.
- 4. Expectations held by individuals regarding controllability of outcomes will alter the way they perceive changes or situations.
- 5. Subjects in the two subsamples have experienced similar sex-role social learning in their lives.
- 6. Subjects experienced similar nursing role socialization during their years in nursing school.
- 7. Sex-typing of subjects has not been significantly modified by the passage of time since entering the

nursing profession.

8. Given anonymity, individuals may score responses that reflect their perceptions of sex-typing and locus of control.

Limitations of the Study

The specific results of this investigation are limited by instrumentation and population in the following ways:

- Measurement devices such as those used in assessing lo-1. cus of control or sex-role perceptions, are limited in their ability to detect an actual state of being. spondents vary in their willingness to express personal beliefs or opinions, so responses are limited to those the subject chooses to reveal at a given time. Lefcourt (1976) cautions investigators to remember that the measures are not the construct. Subjects may score on inventories "as if" they are internal or external, but this does not mean such people "are" internals or externals. Bem (1975a) also points out that the concept of androgyny is limited by current concepts of femininity and masculinity. If sex-role stereotyping in society should change drastically and people become more androgynous, "the concept of androbyny will have been transcended" (Bem, 1975a, p. 15).
- 2. Results of this study are generalizable to other populations only if they are representative of the study

sample. All subjects of this investigation were graduated from the same baccalaureate nursing program, in the same post-secondary institution in Oklahoma, between the years 1973 and 1980. No attempt was made to control age, ethnicity, prior education or family background. Since each of these variables may have influenced the findings to some extent, they are noted as characteristics of the sample and should be considered before making generalizations to other populations.

Definition of Terms

- Sex-typing. The process of social learning that occurs when different rewards are given for behavior depending on the gender of the performer. This process casts certain behaviors, traits, or characteristics into categories that are considered exclusively appropriate for only one gender (Mischel, 1966, p. 57).
- Sex-typed individual. A person who limits his or her behavior and activities to those which conform to societal standards of sex-roles. The sex-typed person has accepted and internalized stereotypic standards of desirable conduct for men and women (Bem & Lenney, 1976).
- Gender identity. The secure sense of one's maleness or femaleness. Awareness of one's specific body characteristics which are male or female, and the physical

- and reproductive implications of these differences (Bem, 1975a).
- <u>Sex-role identity</u>. The socially learned ideas held by an individual about the behaviors, traits, and practices that are appropriate to one's gender. This identity may be feminine, masculine, androgynous, or undifferentiated (Bem, 1977).
- Social learning theory. A theory of personality that views psychological changes and learning as functions of differential reinforcement and modeling (Bandura, 1977, p. 38).
- Modeling. The process by which vicarious learning may take place by the observation of behaviors and consequences of others. Although not experienced by the individual directly, these observations provide contingencies for future expectations (Bandura, 1977, p. 12).
- Locus of control. A construct of belief related to an individual's expectancy that outcomes are the result of one's own efforts and behavior (internal locus of control), or under the influence of fate, luck, or powerful others (external locus of control).

 Operationally defined for this study as the score on

Operationally defined for this study as the score on the Rotter Internal-External Locus of Control Scale. Scored in the external direction, out of possible score of 23 "the higher the score the more external the individual" (Lefcourt, 1976, p. 177).

- Masculine. Operationally defined for this study as the mean score of items selected from traditionally male sextyped attributes on the Bem Sex Role Inventory. Out of 20 masculine items an individual may have a mean score ranging from 1 to 7 (Bem, 1974).
- Feminine. Operationally defined for this study as the mean score of items selected from traditionally female sex-typed attributes on the Bem Sex Role Inventory.

 From 20 feminine items an individual may have a mean score ranging from 1 to 7 (Bem, 1974).
- Androgynous. Operationally defined for this study as scores falling above the median on both masculinity and femininity scales of the Bem Sex Role Inventory. Based on the normative data the BSRI medians for femininity and masculinity were 4.90 and 4.95, respectively (Bem, 1979).
- Undifferentiated. Operationally defined for this study as scores falling below the median on both masculinity and feminity scales of the Bem Sex Role Inventory.

 Based on the normative data the BSRI medians for femininity and masculinity were 4.90 and 4.95, respectively (Bem, 1979).
- Congruency. Operationally defined for this study as the similarity between "self" and "ideal nursing role" perceptions as measured by the Bem Sex Role Inventory. Perceptions were categorized as feminine, masculine, androgynous, or undifferentiated.

CHAPTER II

REVIEW OF THE LITERATURE

Sex Role Development

The process of sex role acquisition has been the subject of considerable research and debate. The question of the relative influence of biology or environment as the primary determinant of sex differences in behavior is termed the "nature-nurture" debate and remains a continuing controversy (Bixler, 1980).

Biological factors

Broverman and associates (1968) noted differences in the activation and inhibition of the nervous system related to gonadal hormone levels in males and females. Animal studies demonstrated that activation was related to testosterone and estrogen, while progesterone was found to depress neurological activity. Hoyenga and Hoyenga (1979, p. 128) found testosterone to be linked to male aggression, yet these effects were thought to be an interaction between biological and social factors. The effects of male hormones on aggression varies across species, with less influence on

social-living animals such as dogs and some types of primates (Hoyenga & Hoyenga, 1979, p. 130).

Money and Ehrhardt (1972), in a summary of extensive biomedical research, show impressive evidence that biological factors are not nearly as important as social identity in producing sex-specific behavior. Studies of infants born with ambiguous or incorrect sex assignment due to malformed external genitalia, demonstrated that sex roles, behaviors, mannerisms and fantasies of these children remained consistent with their early assigned sex, regardless of their actual chromosomal or gonadal sex. The acquisition of gender identity was found to occur before the age of three or four years.

Cross-cultural studies of sex differences have done much to dispel the notion that sex roles are innate or inevitably attached to one's gender. Mead, in her studies of three primative New Guinea societies, concluded that "evidence is overwhelmingly in favor of the strength of social conditioning" (1969, p. 260). She found masculine and feminine traits as differently defined and manifested across cultures as the clothing, customs, and other ornamentation.

While some researchers do not readily dismiss biological influences on sex-specific patterns of behavior, a growing number view the phenomena as interactions between biological factors and those that involve learning and environment (Bixler, 1980; Hoyenga & Hoyenga, 1979, p. 130). Still

others present evidence of the <u>supremacy</u> of social development in determining whether an individual will display or express agression or other traits (Brooks-Gunn & Matthews, 1979, p. 133; Stockard & Johnson, 1979).

Psychological theories

There are three major psychological theories of sexrole development: cognitive-developmental theory (Kohlberg,
1966), identification theory (Kagan, 1964; Sears, Rau, &
Alpert, 1965) and social learning theory (Bandura & Walters,
1963; Mischel, 1966).

Cognitive-developmental theory attributes sex-role acquisition to cognitive learning. Kohlberg (1966) proposes that the child intellectually sorts out meaning from the environment according to his or her level of development. A child's concepts of gender and sex-role identity are seen as developing through stages that parallel Piaget's cognitive development stages. Kohlberg's research indicates that children define reality only as they are able to cognitively perceive it. As they mature and are capable of more abstract thought, they will change in their sex-role identity to more complex conceptualizations. Kohlberg claims to hold an interactionist view by recognizing that biological and cultural factors do modify cognition and experience. He affirms, however, that intellectual function and cognitive growth are the crucial factors which lead to sex-role identity (Kohlberg, 1966, p. 82).

Children learn sexual differentiation, according to Kohlberg, by the age of two or three, but they have not developed cognitively to the point of gender constancy. child without gender constancy would expect that a man could become a woman by simply growing long hair and wearing a dress. Somewhere between ages four to six years, gender constancy is achieved, and children begin to see relationships between gender and values. Power, prestige, and competence are recognized as sex-related qualities and children of both sexes will often imitate their father. The next stage, that of conformity, is generally seen between the ages of five and seven years. Children adopt strict definitions of sex role and imitate sex-typed behaviors. By the final stage, which continues through adolescence, there are stronger tendencies to model those who are of the same gender, with boys selecting models holding occupational roles of power and prestige (Kohlberg, 1966).

Hoyenga and Hoyenga comment that Kohlberg's research has provided important insights into the cognitive factors influencing sex-role adoption, but his theory may have neglected emotional factors (1979, p. 191).

Identification theory postulates that sex-role behavior occurs as the result of the child's identification with the same-sex parent. Identification theory is more accurately a collection of theories that hold the previously stated postulate (Brooks-Gunn & Matthews, 1979, p. 98).

Beginning in psychology with Freud's fear-based identification motives (1933, pp. 153-160), to the more positive identification theories of Kagan (1964) and Sears (1965), each theory has led its proponents to base sex-role acquisition in the parent model.

Kagan suggests that envy or desire of the parent's power or privilege may be the motivating force (1964). Sears and his colleagues stress strong positive emotional motivators in the identification of sex-role differences (1965). The child, according to Sears, imitates and identifies with the parent that is associated with love and nurturance, hence both sexes tend to identify with the mother in early years. Later, when the child is able to cognitively distinguish between genders, identification with the same-sex parent occurs out of love and a desire to imitate the object of his love. Sears and his associates, in studies of maternal behaviors and their effect on sex-role identification, demonstrated that attitudes of restrictive punitive mothering tends to feminize both girls and boys (Sears, Rau, & Alpert, 1965).

Kohlberg also ascribes a part of his cognitivedevelopmental theory to the process of identification (1966). In his research, he found that paternal warmth tended to masculinize boys, while maternal warmth was not significantly related (Kohlberg, 1966).

Lynn's theory of identification differentiates between the processes of sex-role acquisition for boys and girls

(1966). Whereas females have high contact with their samesex model, the male must identify with a "culturally defined masculine role" (Lynn, 1966). The strong sex-typing of males has been attributed in part to their identification with a stereotype rather than a living model. Lynn explains further, that when males identify more closely with their mothers rather than their fathers, they are less likely to be strongly sex-typed (1966).

In the absence of an overall unifying theory of identification, it remains a phenomenon of unclear origins and motives. There is much evidence that children generally do adopt behaviors and prefer association with their same-sex parent (Lynn, 1966; Sears, Rau, & Alpert, 1965), but the research does little to clarify the specific mechanisms involved. There is, consequently, no universally accepted explanation for identification processes.

Social learning theory approaches the study of sexrole differences with little emphasis on physical differences. Differential reinforcement of behaviors, modeling of
both behaviors and reinforcements, and generalization from
one situation to another are the key concepts of their theory
(Hoyenga & Hoyenga, 1979). Developed in the mid 1950's by
behaviorist Julian Rotter, this theory's conceptual basis
was drawn from earlier theories on motivation by Lewin,
Hull, Miller, and Tolman (Estes, 1970, p. 126). While the
role of motivation in learning has long been recognized by

most views of learning theory, the relationships of motivation to external stimuli and reinforcements have been most pronounced in theories proposed by the behaviorists (Bandura, 1977, pp. 2-13).

Lewin, Rotter, and Atkinson attribute motivation of behavior to three main factors: 1) motive, or the generalized inclination to approach a given set of stimuli, 2) valence, or the incentive value of the specific set of stimuli, and 3) expectancy, or the estimated likelihood that an approach or avoidance will accomplish the given goal (Gurin & Gurin, 1970). Rotter stated further, that the third factor expectancy, is just as important as the value or significance of the goal in stimulating behavior.

Learning is defined by these theorists as the reinforcement of expectancy that a given sign or symbol is related to a special significance. The more useful the signs or symbols seem as indicators of this special significance, the more likely the individual is to pursue continued effort to learn them. More simply stated, if learning will make a significant or important difference, the person is more likely to learn (Rotter, 1954, p. 102).

Rotter found that expectancy was related to the development of self determinism in motivation. The tendency of an individual to persist and strive seemed contingent upon the belief that such effort led to desired outcomes. Rotter termed this expendancy-related construct of belief locus of

control (1966). Rather than a trait or type, this characteristic is an individual's interpretation of events which, like other mental constructions, may shift as a consequence of situations and experiences (Lefcourt, 1976, p. 112).

Persons who believe outcomes are contingent upon their own actions, rather than destiny or "powerful others," are termed internal in their locus of control. Those individuals who believe that outcomes are largely a matter of luck or external forces are termed external in their locus of control (Rotter, 1966). Such expectancies are thought to be learned through a lifetime of repeated contingencies, in which consistencies in reinforcements lead to contingency awareness. Persons who demonstrate strong externality in their perceptions of control are often found in situations of life where their behavior or striving seems to have had little influence on outcomes.

In situation where people are deprived and denigrated regardless of their efforts to achieve, contingencies are not reinforced. Likewise, contingencies are not learned by children of overpermissive parents who demand no effort or behavior control for reinforcements and rewards (Lefcourt, 1976, p. 109). A strong contingency awareness is only built by reinforcement and expectancy that certain behaviors and efforts lead to positive outcomes, while other behaviors elicit a withdrawal of reinforcements or rewards.

Individuals who have been socialized to externality

can also be found in ethnic or religious groups that employ superstition and magic. Outcomes are considered a whim of "powerful others" and under control of those with the strongest magic. Such individuals would not be likely to question injustices in life, but rather would accept them as the natural order of things (Lefcourt, 1976, p. 16).

Locus of control is thought to be closely related to the motivation to learn. If outcomes are perceived to be a function of luck, chance, or external forces, there is little value seen in striving. The lack of predictability in outcomes and the failure of the individual to perceive any causality in his or her behavior, may lead to feelings of helplessness and subjectivity (Rotter, 1966, p. 1). Though not directly correlated with intelligence, per se, the internally locused individual makes more careful selections of experiences, involvements, and data acquisitions. When a person realizes that his intellectual efforts pay off, the internal control perceptions lead him to be inquisitive, curious, and alert to new information (Lefcourt & Telegdi, 1971). Comparisons of internally locused persons will find the more intelligent person holding the advantage. However, a highly intelligent person who is external, held captive emotionally by feelings of powerlessness and ineffectiveness, may accept dependency from those perceived as more competent. By abrogating feelings of control, the external person may actually seek less information and calculate outcomes less often (Lefcourt, 1976, p. 52).

While Rotter initially found no influential sex differences in locus of control beliefs, later research has demonstrated otherwise. Studies by Feather (1967, 1968) at the University of England showed higher levels of externality among females than among males. Nowicki, in a paper cited by Lefcourt (1976, p. 147), found the tendency for externality in females to be related to the fear of success. Later studies have supported these findings (Midgeley & Abrams, 1974; Savage, Stearns, & Friedman, 1979; Tresemer, 1976).

Maccoby and Jacklin (1974), in a review of locus of control findings and sex differences, point out that the sexes do not differ significantly in locus of control through elementary and high school years, but by college the trend is toward female externality. These findings are consistent with cultural stereotypes, where the males shown on television and in books are the doers, rescuers, and initiators. Female stereotypes perpetuate the idea that good things happen to females as a function of luck or the initiative of others (Maccoby & Jacklin, 1974, pp. 156-157). There appears to be inconsistencies in locus of control among females that do not appear in males. These findings may be the result of the less stereotypic sex-role socialization of women and the variation in their fear of success. The need for more theoretical attention and research on sex differences and the relationships of locus of control, achievement, and fear of success has been strongly advocated in the literature (Joe, 1971; Lefcourt, 1976, p. 146).

Locus of control dimensions are measured for research purposes by asking subjects to answer a set of questions that are designed to elicit perceptions about certain outcomes. Most scales are forced choice instruments that result in a score on one side or another relative to externality or internality. In a review by Throop and MacDonald (1971), the Rotter Internal-External Control Scale was judged the best test for use with adults. The other thirteen scales included the first internal-external test by Phares (1955) and adaptations of either the Rotter or Phares scale for adults or for children.

Recently Bandura and Mischel have departed from the classic Stimulus-Response view of behaviorism associated with earlier social learning approaches (Bandura, 1977; Mischel, 1973). These researchers advocate a more flexible interpretation of environmental influences. Bandura emphasizes the importance of social shaping through reinforcement, but also acknowledges the importance of cognitive potential and processes.

The use of symbols and models are important in the process of learning, according to Bandura (1977, pp. 1-15). The use of words, either spoken or written, allows thoughts and ideas to be shared and preserved. The ability to symbolize and retrieve ideas makes humans capable of reflective thought so they are able to see probable consequences of different actions. This process logically involves both

cognitive and social abilities.

Bandura's notion of self-regulating capacities is another departure from strict behaviorism for it recognizes that once contingencies are learned, they can become self-This moves away from the operant reinforcement determined. procedures of social shaping, to the abilities of humans to learn through observation, interaction, and imitation. a thinking individual, one can watch outcomes, contingencies, and relationships in a way that can help one predict, plan, and choose behaviors selectively. Through interaction with others, a person discovers which behaviors lead to desired By learning to be a wise chooser, one can direct outcomes. one's own destiny, based upon an awareness of one's available time, energy, financial and intellectual constraints (Bandura, 1977, pp. 1-15).

Modeling, a social learning construct emphasized by Bandura, is thought to be an important basis for learning sex roles and other behaviors (1977, pp. 22-50). The ability to observe cause-and-effect relationships in others allows vicarious learning without actual involvement or performance by the learner. Numerous studies have demonstrated the power of modeling in stimulating imitative responses (Bandura, 1965; Bandura & Kupers, 1964; Bandura, Ross, & Ross, 1963).

The process of modeling sex roles is a necessity, according to Maccoby and Jacklin (1974, p. 285), because the rate and characteristics of sex-role learning are far too

expansive to have been taught by direct tuition or by differential reinforcement alone. By watching models, children sort out and learn subtle and elaborate behavioral and attitudinal patterns and mannerisms. Maccoby and Jacklin assert, however, that the modeling itself is not sex-typed, since both boys and girls learn and can imitiate both male and female behaviors. Rather, it is the knowledge or awareness of which behavior is appropriate that sex-types the selection of activities that a person will perform (Maccoby & Jacklin, 1974, p. 300).

Bandura points out that in addition to a model, there must be attentional processes, retention processes, psychomotor capabilities, and motivational processes (1977, p. 23). This means that the ability to perceive or attend to a modeled event can be strongly influenced by emotional factors, fatigue, and cognitive ability, as well as reinforcement rewards. The value of the reward, the expectation that the performance is within the person's capability, and the feedback one gets as a result of the performance all play important roles in the process of modeling.

Attentional processes may override reinforcement as a condition for learning by observation. Studies by Bandura, Grusec, and Manlove (1966) demonstrated that observational learning can occur without incentives or rewards. Other studies showed that engaging or pleasing qualities of the model can influence observational learning (Bandura, 1977, p. 24).

Power or dominance is another characteristic found to have influence in observational learning when it is perceived to be held by the model (Bandura, Ross, & Ross, 1964; Mischel & Grusec, 1966). This power related dimension is also seen in the tendency for both boys and girls to imitate behaviors of an aggressive model, although the forms of aggression were less violent in girls (Bandura, 1964; Bandura & Kupers, 1964; Bandura, Ross, & Ross, 1963).

Achievement motivation was found by Stein and Bailey (1973) to relate to modeling of an achievement oriented parent. Adolescent girls with high achievement motivation had either low maternal identification or mothers who were atypical feminine role models. Employment of middle-class mothers correlated positively with high educational and career aspirations of their daughters (Stein & Bailey, 1973).

Mischel's conceptualization of social learning theory exphasizes the importance of <u>individual differences</u> in the way people encode and categorize the events they experience or observe (1973). This individuality interacts with learned behavior and consequences to affect different people in differing ways. In the process of acquiring sex-role patterns, each child acquires a complex history of reinforcement in many behaviors. The amount of same-sex or cross-sex behavior the child chooses to perform will be influenced by the response-consequences and the symbolic meaning that has

been learned about the behavior. Studies by Mischel and Grusec (1966) of imitative responses to adults with varying levels of power or authority, demonstrated a greater likeli-hood for children to imitate the most powerful. In addition, children learned sex-specific behaviors even when they were the object of the behavior's aversive consequences (Mischel & Grusec, 1966).

Like Bandura, Mischel advocates a cognitive-social learning stance. "It is often mistakenly assumed that social learning theories deny the existence of mediating cognitive processes" (Mischel, 1966, p. 62). He affirms that social learning theory does not consider persons as either "empty or passive: it simply views an individual's social behavior as under the control of internal and external stimuli whose effects are lawfully determined by his previous learning history" (Mischel, 1966, p. 62). Identification by the child of his or her gender identity is acknowledged by social learning theory and is considered to be an enduring characteristic. However, the wide variations in behavior among individuals of the same sex, and across the two sexes, lend support to the idea of individual differences and the notion that "there are many ways to be a man or woman" (Mischel, 1966, p. 62).

The social learning of <u>aggression</u> has been studied by numerous investigators as it relates to sex differences (Bandura & Walters, 1963; Sears, Rau, & Alpert, 1965). Aggressive behavior is of interest to researchers because it has been

considered a major variable in delineating masculine and feminine behaviors. In these studies, boys showed greater physical agression and antisocial behavior than girls. Sears, Maccoby, and Levin (1957) discovered that mothers allowed much less aggressive behavior in their daughters than in their sons. In neighborhood situations, mothers tolerated more aggressive behavior from boys than from girls, and often encouraged their sons to fight back if they were being harassed by other children. Mischel found that "prosocial" aggression was tolerated in girls in the form of argument or in "spanking" dolls, but this was considered by most boys as "sissy stuff" (1966, p. 73). Responses of fathers to young children were studied by Lamb (1977). Lamb criticizes traditional research in its tendency to overlook or devalue the father's role in child development. These studies demonstrated a difference in the type of activities mothers and fathers model around their infants: mothers tended to care and nurture while fathers tended to play with and stimulate the child. Boys were more often the recipient of aggressive punishment for misbehavior with fathers using more physical discipline on their sons (Tasch, 1952). Fagot (1978) found that fathers were more concerned with providing sex-appropriate behavior than were mothers; and more concerned with providing male models for boys than for providing female models for girls.

The social learning of dependency has also interested

researchers, as this is another sex-role attribute traditionally used to delineate masculine and feminine behaviors. Sears (1965) found no appreciable differences in dependency in boys and girls at early ages, but found an increasing trend toward dependency in girls as they grew older. Dependency behaviors in six to ten year old girls were found positively correlated with dependency in their adult years, while there was no correlation between adult male dependency and dependent behavior in youth (Kagan & Moss, 1962).

Although evidence supports the idea that females are more dependent than males, Hoyenga and Hoyenga suggest that the concept of dependency is complex and this conclusion depends upon the definitions one uses (1979, pp. 299-300). In their review of research on female dependency, they found the concept to have "aggressive" dimensions, when used for negative or manipulative objectives, and "attachment" dimensions, which are more affection oriented. Attachment dimensions include both proximal behaviors (touching and clinging), and distal behaviors (affiliation and communication). Hoyenga and Hoyenga also point out that dependency can encompass both emotional and instrumental behaviors. Dependency can be used to obtain affection and approval, or to obtain help and assistance. Parents tend to reward and reinforce girls who express dependency by requesting help and assistance (Cantor & Gelfand, 1977; Rothbart & Rothbart, 1976).

A social learning approach to the development of sex roles has provided researchers with considerable evidence that sex-specific behaviors are acquired as a result of reinforcement, observation, and imitation. It further provides a useful framework for analyzing motives, behavior, and the consequences of sex roles.

Sex-Typing

The stereotypic categorization of social roles and behaviors is learned early in life through parental modeling and the influences of family, friends, teachers, and public entertainment media. David and Brannon specify that sextyping or stereotyping is related to, but different from, social role learning (1976, p. 5). Roles are patterns of behaviors which a person is expected and encouraged or trained to perform. Stereotypes are behavior patterns which are expected, but not necessarily desired or encouraged. Social roles and stereotypes are more closely related when the expectations formed by the stereotype have an element of encouragement in them (David & Brannon, 1976, p. 5). Just how persuasive stereotypes are in creating "self-fulfilling prophesies" in social behavior, remains a subject of continuing research and debate.

Factors Contributing to Sex-typing

Sex-typing and other stereotypic categorization is thought by some social scientists to serve a functional and

desirable function for small children (Rebecca, Hefner, & Oleshansky, 1976; Stewart, Powell, & Chetwynd, 1979, p. 222). Children find this an easy way to "make sense" of the world and to learn quickly the behaviors that will elicit good and bad social responses. Without straining the cognitive abilities of young children, the idea of polarities for girls and boys is a simple way of organizing information. The problem, however, lies in the societal tendency to reinforce and perpetuate these perceptions far beyond early childhood. stereotype becomes more than an organizational device and is accepted as the adult norm. Considerable evidence has shown that in adult years, rather than being functional, the continued adherence to sex-typed attitudes may actually be dysfunctional (Bem, 1975a; Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Gump, 1972). Further, it is thought to be the primary factor in the pervasive sex discrimination found in today's society (Rebecca, Hefner, & Oleshansky, 1976, p. 94).

The differential treatment of males and females begins at birth. Beside the obvious differences in clothing, toys, and color-scheme selection for infants there are differences in parent-child interactions. Several studies of vocal and verbal stimulation of infants indicate that during the first few months of life, the female child received more verbalization than does the male child (Cherry & Lewis, 1976; Moss, 1967; Rebelsky & Hanks, 1971). Moss (1967) and the

Cherry and Lewis study (1976) showed that parents touched and physically stimulated male infants more than females. children grew older, fathers became more active in vocally stimulating sons (Rebelsky & Hanks, 1971), but irritable fussy boy infants received less attention from their mothers than did irritable girl infants (Moss, 1967). searchers believe that the differential social treatment of girls provides them with more social training (Moss, 1974). Others (Fagot, 1974; Hoyenga & Hoyenga, 1979, p. 209) believe that there are some innate sensory and motor development differences among females and males which may make them behave differently in infancy. In the latter case, the parent may be affected by the infant as well as affecting the infant's behavior. Maccoby and Jacklin (1974), in an extensive review of parent-child research, found trends that were consistent with the previously mentioned studies, yet concluded that these findings were not significant with respect to sex differences.

Parental expectations of sex role, play an important part in determining the amount of social pressure they will apply to assure compliance by their children. Fathers were found to be more preoccupied than mothers with sex-appropriate behavior (Fagot, 1978). Lansky reported similar findings along with greater paternal concern for sons than daughters to conform to their appropriate sex roles (1967). Hartley (1959) found that boys are pressured at a much earlier age

than girls to comply with sex roles, and with more dire consequences. In addition, there is an explicit message to avoid adoption of anything "feminine." Balswick and Peek suggest that this parental reinforcement to avoid characteristics that are perceived as sensitive or feminine, leads male children to inhibit expressiveness and emotion (1976, p. 55). The male child is encouraged to "act tough" in an effort to be a "big boy." Aggression and rugged persistence are expected and reinforced by parental valuation of masculinity in their sons (Balswick & Peek, 1976, pp. 55-57).

Differential treatment of boys and girls can be found throughout the school years. Although the institution of the federal law prohibiting sex discrimination in education, Title IX, was enacted in 1975 and has resulted in wide changes in official curricula (Nemerowicz, 1979, p. 170), there persists an elaborate "hidden curriculum" that continues to provide subtle sex-typing of children (Frazier & Sadker, 1973; Saario, Jacklin, & Tittle, 1973). Serbin and associates found that differential treatment of boys and girls occurred in teacher-child interactions in pre-school (1973). Boys' behavior of any type, received more teacher attention than did girls' behavior, with more teacher behavior reinforcing aggression and independence in boys (Serbin, O'Leary, Kent, & Tonick, 1973).

Fagot and Patterson (1969) found that sex-typed behaviors in schools were strongly reinforced by peers, with peer

punishment for deviation more cruel than that administered by adults. In the same study, the investigators reported that teachers were more likely to reward "feminine" behaviors from both male and female students. These behaviors are those often associated both with females and with being a "good student," according to one educator cited by Brooks-Gunn and Matthews (1979, p. 184): they include "propriety, obedience, decorum, cleanliness, silence, physical and, too often, mental passivity." The contradiction between teacher expectations of passive behavior and expectations of peers, is thought by the educator to be a source of poor school adjustment for some boys. The amount of attention given for either negative or positive behaviors in the classroom appears to be greater for boys than girls (Berk, 1971; Meyer & Thompson, 1956; Serbin, O'Leary, Kent, & Tonick, 1973).

There appears to be an implicit cultural expectation in many societies, including America's, that men need special attention in order to achieve "masculinity." Whether this concern is, as Lynn asserts (1969, pp. 24-26), a societal precaution against the relative lack of male models during childhood, or a fear that the lack of masculinity implies inferiority, the demand for stereotypic compliance is great. As one social scientist interprets the social prompting (Stearns, 1979, p. 11),

Don't cry. Don't be a sissy about pain. Keep up with the other boys. Compete. Be a good sport. Sin. Don't for God's sake, be gay. Be kind to women, treat them rough, and don't tell them nothing.

One factor that is thought to influence the male's stereotypic adherence to "masculine" behaviors, particularly in America, is homophobia, the irrational fear of homosexuality. Homophobia has been found more prevalent in males and is particularly strong in attitudes toward males (Lehne, 1976; Morin & Garfinkle, 1978). Lehne points out that the fear of being labeled homosexual because of lack of masculinity is irrational. Such fears are built upon misconceptions and stereotypes about male homosexuality (Lehne, 1976, p. 66). Morin and Garfinkle believe that homophobia plays a major part in the maintenance of traditional male sex roles, but found these attitudes amenable to change (1978).

Women appear to be taught to "please," through reinforcement and modeling by other women. Although this task may be somewhat easier in early life because of the ready access to a maternal role model and the reinforcement by teachers, girls soon learn they are punished for being female (Lynn, 1969, pp. 65-78). With dependency reinforced in females (Cantor & Gelfand, 1977; Rothbart & Rothbart, 1976), and a general lack of confidence associated with their inferior status (Chafetz, 1978, p. 129), the need for social approval and affiliation logically follows.

Stein and Bailey postulate that girls have been socialized in a manner that fuses motives for affiliation and achievement (1973). Rather than just seeking achievement to receive social affiliation, some women may perceive that as

a motive they are one and the same. Such findings have been used to explain the failure for high achievement in females to correlate significantly with locus of control and other measures of independence (Buss, 1976, p. 238). Simply stated, some women may strive to achieve, not because they perceive control over the outcome of their efforts, but rather because they receive approval and affiliation for striving.

The female's fear of disapproval has been the subject of two proposed achievement-related areas of research: of failure and fear of success. Crandall and Rabson (1960) reported that females are more likely than males to avoid failure situations or to give up after initial failures. Other studies have found inconsistent differences between sexes or none at all (Maccoby & Jacklin, 1974, p. 150). Horner (1972) has proposed that women fear negative consequences if they are successful. When asked to complete stories about potentially successful achievement of women in competition with men, a majority of women constructed stories that evidenced a motive to avoid success (Horner, 1972). While research on fear of success continued, there are still inconsistent findings of sex differences in this construct (Tresemer, 1976). There have been, however, consistent correlations between fear of success and external locus of control (Midgley & Adams, 1974; Savage, Stearns, & Friedman, 1979; Tresemer, 1976).

Attribution of success and failure differs between

men and women, with men more likely to attribute success to their own ability (Deaux & Farris, 1977; Stein & Bailey, 1973). Women, on the other hand, attribute their successes to hard work or luck. For failure, the attributions are reversed, with men more frequently blaming their failure on bad luck or lack of effort and women attributing their failure to lack of ability (Frieze, 1975). Frieze speculates that since women see success as a function of luck rather than their own ability, they are less likely to see the experience as positive or worthy of pride (1975). These perceptions hold true for both male and female regard of other people's success, with the male's success and female's failure attributed to the performer's ability, and the male's failure and the female's success reflecting luck (Feather & Simon, 1975; Mokros, Taylor, & O'Neill, 1977).

The Sex-typing of Occupational Roles

The ideology of differences in skills and competencies between sexes is dramatically seen in occupational settings. Sex-typing creates a climate of acceptance for the sex-appropriate applicant and one of avoidance for the sex-inappropriate one (Holland, 1966; Roe, 1956; Super, 1970). Occupations that have a majority of people of one sex are considered sex-typed when there is no logical reason for the disparity. Few occupations can offer legitimate reasons for sex-specific requirements for applicants unless there are clear physical

mandates (such as wet-nurse or sperm donor).

Definite ideas about sex-appropriate occupations are found among very small children. Nemerowicz found that both boys and girls tend to view the man as worker and the woman as housekeeper (1979, p. 159). Girls, however, saw increased advantages in the male role as they grew older, and were more likely to choose non-traditional feminine work for future goals. The boys in this study tended to show some antifemale attitudes in their low ratings of female occupations. owicz states that children's ideologies of sex roles parallel those of adults. Although the children would not acknowledge that one sex was superior to another, they perceived that a woman's biology limits her ability to perform most occupational skills as well as a man. Men, on the other hand, were perceived as capable of any social or work role if they had been properly trained. Children in this study appeared insensitive to the inequality implicit in this ideology (Nemerowicz, 1979, p. 158).

As in other success predictions, the success of men and women in sex-inappropriate jobs is predicted differently by boys and girls (Minuchin, 1975, p. 270; Nemerowicz, 1979, p. 160). In an investigation of adolescents' predictions of success, the most negative consequences were predicted for a male who was about to become a head nurse. In response to a question about how John, the nurse, must feel about his promotion, a youth responded, "John must feel silly if John is

a boy" (Mokros, Taylor, & O'Neill, 1977, p. 362). In the same study, females succeeding in male-dominated professions were predicted to be happy. Nemerowicz found that of all occupations least likely to be chosen, nursing was least likely to be picked by boys (1979, p. 139). Two other highly rejected occupations for both boys and girls were sex-typed as feminine: teacher and secretary. Girls tended to be more liberal in their acceptance of sex-inappropriate jobs but shared the boys' opinion that girls would be less competent than boys in performing the work (Nemerowicz, 1979, p. 158).

Although Nemerowicz found sex-role stereotypes liberalized somewhat by age (1979, p. 160), Hesselbart found them still common among college students (1977). Discrimination based upon sex, provided strong predisposition for career and college choice and subsequent acceptance. Hesselbart charges that professions tend to perceive that males and females are competent in different ways: males more logical thus making better lawyers, and females more nurturant thus making better nurses (1977, p. 410). Such predispositions tend to channel and reinforce sex-appropriate applicants to the proper professional school and cause the other-sex student to seek other career options.

While males have been found in many studies to hold a prejudicial edge in employment opportunities (Lewin & Duchan, 1971; Rosen, Jerdee, & Prestwich, 1975), they also meet with discrimination when they attempt to cross over sex-typed

boundaries (Acuff, 1977). The male employee is also more likely to be criticized for failure, for being expressive or emotional, for joining a "feminine" profession, and for losing his job (Komarovsky, 1973; Levinson, 1976; Rosen, Jerdee, & Prestwich, 1975). On scales of likability, both men and women rated women with masculine interests high, as long as they did not have a man-like personality (Kristal, Sanders, Spence, & Helmreich, 1975). In the same study, passive "feminine" men were the most unpopular, regardless of their interests. Thus, one could conclude that men and women who cross over traditional sex-roles in occupations and interests will be better accepted if they retain personality attributes that are sex-typed.

Touhey conducted two studies (1974a; 1974b) to determine the effect of sex-typing on the prestige of occupations. In the first study, five typically feminine sex-typed occupations (home economist, kindergarten teacher, registered nurse, librarian, and social worker) received higher ratings of prestige and desirability when the subjects were informed of the increasing number of men coming into these fields. The second study showed an opposite effect when five typically masculine sex-typed fields (architect, college professor, lawyer, physician, and scientist) were rated after subjects were informed of the increasing number of women entering these professions. Subjects predicted that male-dominated fields would become less desirable, and their members less

successful with the entry of more women (Touhey, 1974b).

Sex-typed occupational bias was also found by Sedge-wick (1973), in a study of college English students who were asked to evaluate writing done by persons in sex-inappropriate fields. Although sex-appropriateness was not found to be related to perceptions of likability or being well adjusted, there were predictions of increased competence when the writer's sex matched the traditional occupational role. All judgements in the competency predictions were biased toward maleness (Sedgewick, 1973).

Lehne points out the relationship of occupational sextyping to homophobia (1976, p. 69), in the male's avoidance of traditionally femine professions. In real work situations, Lehne states, there is no evidence that homosexual men choose less masculine occupations than do heterosexual men. The most homophobic men, however, tend to eliminate themselves from stereotypically feminine professions, while casting dispersions on other men who would consider them.

Assessment of Sex-role Perceptions

In extensive studies of nearly a thousand American subjects of differing age, sex, marital status, religion, and educational level, Broverman and colleagues discovered a strong consensus on sex-role standards (1972). Their findings reveal that those characteristics commonly associated with men are more highly valued than those assigned to women. Positively valued traits assigned to men were those involving

competence, rationality, and assertiveness, while those assigned to women reflected warmth and expressiveness (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972). Items were chosen from these characterizations and a Stereotype Questionnaire was developed to investigate how men and women would rate themselves. The self descriptions of the tested men and women were far less stereotypic than those they had previously ascribed to men or women, although there were significant sex differences in self ratings. When later asked to rate traits that were ideal for men and those ideal for women, their ratings fell in strong stereotypic agreements (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972).

The Broverman stereotypic trait inventory is typical of many scales and inventories that have been generated over the past forty years that measure masculinity and femininity as polar opposites. Constantinople (1973), in an extensive review and critique of existing scales for measuring masculinity and femininity, questions the evidence that they actually measure a bipolar dimension. She further proposes that masculinity and femininity are not separate dimensions, but that persons are capable of being both masculine and feminine.

Scales by Heilbrun (1976b), Bem (1974), and Spence,
Helmreich and Stapp (1975) were constructed on an orthogonal,
rather than a bipolar, model. Beere explains how both masculinity and feminity can coexist in a person's self

perceptions without providing contradictions. "Just as people can be tall and thin or tall and fat, people can be feminine and masculine, or feminine and not masculine in their sex-role preference, adoption, or orientation/identity" (Beere, 1979, p. 21). Beere states further, that the theoretical formulations derived from orthogonal instruments will likely be different from those which are derived from instruments that treat masculinity and femininity as opposing ends of one continuum.

Beere (1979, p. 21) found that most researchers who consider masculinity and femininity as separate constructs, agree on the term androgynous for persons scoring high in both dimensions. Bem, in her original work, had defined androgyny as inversely related to the difference between an individual's masculinity and femininity scores (1974). Later, Spence, Helmreich, and Stapp (1975) demonstrated differences in behaviors between those who scored high on both masculinity and femininity and those who score low on both dimensions. Using Bem's original definition, both groups would have been termed androgynous. Differences in behavior, adaptability, and social ability between those in low-low and high-high groups led Bem to change her method of scoring (1977). Now Bem, like the Spence group, calls only high scorers in both masculine and feminine dimensions androgynous. Those who score below the midpoint on both masculinity and femininity are termed undifferentiated (Bem, 1977).

The findings in sex-role studies have led researchers like Bem to question old psychological maxims that contain implicit messages that "Appropriate" sex-role identity is desirable (Bem, 1972). Bem challenges Mussen's prescriptive code for child-rearing, in his chapter on early sex-role development, which implies that parents should guide children in "proper" sex-typing (Mussen, 1966). According to Bem (1972), it is time for society to begin examining the consequences of sex-role stereotyping particularly as it relates to mental health. One study strongly validates Bem's concern. Broverman and his associates surveyed a group of male and female clinical psychologists, psychiatrists, and social workers (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). These clinicians ascribed the same traits to "a healthy man" and "a healthy adult," while ascribing the same traits to "a healthy woman" as they did to individuals lacking mental health. This study was replicated later by a group in Australia, according to Hoyenga and Hoyenga (1979, p. 347), with similar results reflecting a double standard for men and women.

Masculine sex-typing in positive traits was found by Spence and associates to be correlated with high measures of self-esteem in both sexes (Spence, Helmreich, & Stapp, 1975). Deutsch and Gilbert (1976) found masculinity on the Bem Sex Role Inventory to be correlated with mental health in both sexes. Heilbrun (1968) found that males who identified with

a masculine father had better mental health than those who identified with a feminine parent of either sex.

In one of the few longitudinal studies of sex-type consequences, Mussen (1962) found that masculine sex-typed boys were better liked and more well adjusted during adolescence than boys that were less masculine. Twenty years later, however, the picture had changed dramatically. The high masculine group still had more ego control, self-sufficiency, and stress resistance than the low masculine group, but showed less dominance, lower self-acceptance, lower social ability, and a lack of self-assurance. Harford, Willis and Deabler (1967) also provide negative correlates with high masculinity in adulthood. High masculinity was found correlated with anxiety, neuroticism, guilt, and suspiciousness in a large group of men ranging from age twenty to sixty. The Mussen and Harford data seem to support the notion that high masculinity for males is functional during the identityconscious adolescent years when peer groups are reinforcing masculinity. However, in adulthood the need for a greater variety of behaviors and relationships makes stereotypic constraints less functional.

There seems to be a more consistent picture of poor adjustment for high femininity in girls, particularly if they are also low in masculinity. Heilbrun (1976a) found the highest percentage of women seeking help at a college mental health center were high feminine and low masculine in

sex-type. Deutsch and Gilbert (1976) found high femininity correlated with poor mental health. High femininity in women has also been correlated with high anxiety, unstable response to aggression (Consentino & Heilbrun, 1964; Gall, 1969), lack of adaptability in performing non-feminine behaviors (Bem & Lenney, 1976), and a lower self-esteem (Fem, 1977; Spence, Helmreich, & Stapp, 1975).

Androgyny and its Consequences

Considerable attention has been directed during the 1970's to the concept of androgyny. Rossi (1964) suggested that conceptions of masculinity and femininity have outgrown their usefulness in today's world. Rossi further encouraged flexibility in both men and women to cultivate characteristics of both sexes. Behaviors then could be chosen to suit the occasion and need of the individual. Persons could be both instrumental and expressive, independent and sensitive to the needs of others, depending on the circumstances. an individual would be able to perform typically feminine and masculine skills or behaviors without discomfort or hesitation. A number of researchers share this view and have collected an impressive amount of evidence that androgynous self-perceptions are predictive of healthy effective individuals (Bem, 1975b; Bem & Lenney, 1976; Kaplan & Bean, 1976; Rebecca, Hefner, & Oleshansky, 1975).

In studies that correlate strong sex-typing and adjustment, persons who combined traits from both sexes were

found among well-adjusted men and women (Deutsch & Gilbert, 1976; Spence, Helmreich, & Stapp, 1975). Androgyny was correlated with greater maturity in one's moral judgements (Block, 1973), increased self-esteem (Spence, Helmreich, & Stapp, 1975), and increased levels of both instrumental and expressive function (Bem, 1975b; Bem, Martyna, & Watson, 1976). In addition, the androgynous person, whether male or female, was found to be more nurturant in human interactions than feminine males or masculine females (Bem, Martyna, & Watson, 1976). Further, while feminine women in this study were found nurturant in human interactions, they lacked independence and instrumental competence.

Bem (1975a) contends that the non-androgynous person may be seriously restricted in the kinds of things he or she can do as different situations arise. In performing tasks or activities that he or she has been socialized against, the sex-typed person may be inexperienced and even feel emotional discomfort. This restriction has been correlated with lower overall intelligence, lower levels of creativity, and lower spatial ability in sex-typed persons (Maccoby, 1966, pp. 43-45). Bem's research (1975a) and that of her colleagues (Bem & Lenney, 1976; Bem, Martyna, & Watson, 1975) have served to support the notion of increased flexibility and adaptability among those who do not let sex-typing limit their choice of behaviors and responses.

Sex-typing and the Nursing Profession

Ashley (1976, pp. 75-94) maintains that sexism plays an important part in keeping the "hospital family" in line. With females in Victorian times initially serving as the models for nursing's development in this country, the role of subservience to male authorities was as natural to women in nursing as it was to their cultural life outside the profession.

When the nursing profession threatened to improve itself at the beginning of this century, and break loose from apprenticeship learning from physicians, the medical profession rose in numbers to protest. Contending that "good nurses are born, not made," the physicians opposed advanced education for nurses, advocating only the teaching of simple procedures. Ashley quotes from a speech made by a noted physician in 1908 to a group of graduating student nurses (1976, p. 77),

If a little knowledge is a dangerous thing in most avenues of employment, in nursing it is more than dangerous, it is fatal. Good nursing is not facilitated by too elaborate an education in professional matters; rather it is hampered or even rendered useless thereby.

Hospitals depended heavily on nursing students for a work-force and schools proliferated during the 1880's and early 1900's. Curricula consisted of over 98 percent hospital work and less than two percent theory, yet doctors persisted in their complaint that nurses were overtrained (Kalisch & Kalisch, 1978, p. 162). A Madonna-like nurse image

persisted during these years and the nursing population was almost exclusively female. The exceptions were those men who were allowed to work where physical strength was needed: with alcoholics, the mentally ill, or combative patients. Another area considered appropriate for men nurses was in the care of men with genitourinary problems (Kalisch & Kalisch, 1978, p. 137). The training of men nurses became a possibility in 1888, with the opening of the Mills School of Male Nursing at Bellevue Hospital (Jamieson, Sewell, & Suhrie, 1966, p. 363), but there were few other schools available. Men found their nursing practice restricted to a narrower range of activities than did their female colleagues.

Few changes occurred in the first part of the twentieth century to promote the status and development of nursing
as a profession. World War I and the 1918 influenza epidemic
were followed in the next two decades by the Depression and
World War II; all increasing the need to prepare a large number of nurses quickly and inexpensively (Kalisch & Kalisch,
1978, p. 362). The severe nursing shortage prompted a Rockefeller Foundation supported study of the problem, headed by
Josephine Goldmark in 1919. The findings, known as the Goldmark Report, revealed widespread exploitation of nursing students for free labor in hospital schools as well as substandard levels of education (Kalisch & Kalisch, 1978, pp. 332337). The study committee recommended that nursing schools
become autonomous from hospitals in their administration and

direction, and provide a liberal education in nursing.

The first autonomous collegiate school of nursing was established at Yale University in 1924 as a Rockefeller Foundation funded experimental program, resulting from the Goldmark Report recommendations. This program, while immensely successful and well recommended, did not set a widely imitated trend. It remained one of the few collegiate programs among hundreds of hospital diploma schools until well past the mid-century.

Throughout this time, physicians and hospital association officials continued to express opposition to higher education for nurses (Kalisch & Kalisch, 1978, pp. 338-340). A fight for accreditation rights at the middle of the century reflects, in part, the battle that nursing leaders were mounting to improve educational standards and assure consistency across programs. The publication of a study by Esther Lucille Brown, funded by Russell Sage Foundation grant in 1948, led to the formation of an accrediting body, independent of medical or hospital control. This was a small, but important step toward the liberation of the nursing profession (Kalisch & Kalisch, 1978, p. 510).

The tightening of educational requirements and the restricted use of student power to manage hospital care, has played a central role in making nursing programs too expensive for hospitals to maintain. With their demise, a "cornerstone of convention has crumbled in the long established

subordination of female workers. States Bullough (1977, p. 312),

A distinctly harmful aspect of the extreme subordination which students were taught was the intellectural subordination. A cornerstone of the hospital nursing school education was the belief that the physician was always right, and even when he was wrong he must be made to appear right.

This elaborate game-playing still takes place in health care settings between physicians and nurses. It reflects the "physician was always right" ideology that is perpetuated today by professional socialization. Stein (1968) calls this type of manipulation the "Doctor-Nurse Game." It involves the need for doctors to ask for and get advice from nurses in such a way that their omnipotent aura is preserved. Nurses couch suggestions and recommendations in such a way that they appear to have been initiated by the physician. While Stein terms this situation a "transactional neurosis," it is widespread and characterizes many transactions that occur between males and females outside nursing (Chafetz, 1978, pp. 186-187; Stein, 1968). Bullough (1975, p. 59), expressed hope that the liberation movement and its relaxation of sex-stereotyping will bring more men into the She anticipates, that because men are not socialized to be manipulative and play "doctor-nurse game," they will provide a healthy role-model for females in the profession.

In the 1970's a new movement in nursing emerged that brought renewed protests from physicians about nursing's

independence. This response was to the nurse practitioner movement: an effort to prepare nurses to give primary health care in clinics and community health settings. Even though the preparation of nurse practitioners could significantly offset the shortage of physicians in areas that are underserved and unpopular with doctors, there have been adamant responses (Rhein, 1979). Power and money appear to be significantly related to the issue of expanding nurse roles, yet some nursing leaders believe this movement to be the only responsible solution to the "doctor-nurse game." Whereas nurses have been "making diagnostic decisions for years but had protected themselves with elaborate games, which cast physicians in a decision-making role even when the decision had been made by the nurse," the new movement is stirring nurses to new independence and responsibility (Rhein, 1979, p. 73).

Despite nursing's new quest for leadership and a less feminine image being advanced by the profession, female recruits evidence strongly sex-typed nurse-role expectations (Davis, 1969; Frank, 1969; Levitt, Luben, & Zuckerman, 1962; Till, 1980). Such inconsistencies between role expectations and new-role socialization provides a source of role strain for many novices in nursing, even those traditionally thought to be "sex appropriate" (Schulman, 1972, p. 329).

Sex-role Considerations and Men in Nursing

Accounts of nursing history relate the important role

that men played in the earliest days of patient care. From the Greek temples of healing, to the Roman battlefields, the sick or injured were cared for by men (Jamieson, Sewall & Suhrie, 1966, pp. 42-50). The Middle Ages saw the establishment of male monastic nursing orders (Kalisch & Kalisch, 1978, p. 46), while the only involvement of women in patient care took place in the home.

Institutional nursing remained male-dominated until late in the Middle Ages when female religious orders began to assume nursing duties and term "sister" became inextricably associated with nursing (Jamieson, Sewall, & Shurie, 1966, p. 120).

In these early periods of history there was little distinction between the practice of medicine and nursing, as patient care was largely a matter of hygiene and comfort.

Nostrums and poultices were as readily applied by lay-persons as by physicians (Kalisch & Kalisch, 1978, p. 26). Etzkowitz (1971) credits the entry of women into the profession to the recognition that a part of the physician's work was less desirable, even dirty. Encouraged by Florence Nightingale's superb work with female nurses in the Crimean War, physicians saw an opportunity to relegate the less glamorous and less profitable areas of their practice to women (Etzkowitz, 1971).

Once entrenched, the practice of nursing remained with women. Respectability was won through a fusion of Victorian mores with strict sex-segregated control. Men were allowed

in only through a few all-men schools or religious orders. Attempts to introduce more men into nursing, even during severe shortages, were met with barriers from medical and hospital authorities (Kalisch & Kalisch, 1978, pp. 574-580).

Research related to men in nursing is notably absent from the literature, except for historical texts, until the 1960's. Segal (1962) examined the "status contradiction" of men in a feminine stereotyped profession. Two-thirds of his sample of 22 men nurses questioned the expertise of physicians or expressed regret that they were not doctors themselves. None of the 79 female nurses in the study expressed these views. Men nurses expressed discomfort at being "outnumbered" and supervised by women. Segal's study revealed the beliefs of many female nurses that men who do women's work are suspect. Females in this study expressed suspicions that such men were homosexual. Rogness (1976), Greenberg and Levine (1971), and Bush (1976), in their surveys of men nurses, found that such attributions and prejudices are common. Bush's respondents were quick to point out that they had found no more homosexuals in nursing than anywhere else (1976). Stated one of Bush's subjects, "anyone who says they don't (get ribbed) is living in a really protected world" (1976, p. 401).

The potential for role strain has been recognized in nearly every study and the inconsistencies of the nurturing feminine role with a young man's self-concept has been

identified as a primary avoidance factor in recruitment. Vaz (1968) found male high school seniors rated nursing lowest on a masculinity scale compared to other professional occupations. Such attitudes can be found in pre-school children as well (Nemerowicz, 1979, p. 160).

None of Segals' sample, male or female, would have been pleased to have their sons become nurses. One woman stated, "I just couldn't bear it. Nursing is a female profession, like doctoring is male, or being a policeman" (Segal, 1962, p. 37). So embedded is the female connotation in the term "nurse," that anyone who is not female is labeled with a modified title: "male nurse" or "man nurse." Etzkowitz states that in England, nurses are called "sister," whether the person is female or male (1971). Fottler (1976) suggests that a change in the profession's name might make it more attractive to men.

Mannino (1963) found his sample of men nurses only marginally committed to the profession. Over 73% of his respondents recommended nursing as a "stepping stone" to another vocation. Their reasons for entering the field ranged from humanitarian reasons to a desire for security and advancement. Like Segal's sample, several would have opted for a career in medicine but could not afford it.

The threat to masculinity has been cited as a major source of conflict and role strain in nursing for men (Etzkowitz, 1971; Rutledge & Gass, 1968; Segal, 1962).

Even with those men who feel comfortable with their roles as nurses, the majority complain that there is an ever-constant need to define their status to patients, friends, and the public at large. Most patients and visitors assume that they are physicians, while physicians assume they are order-lies or laboratory technicians (Bush, 1976; Greenberg & Levine, 1971; Rogness, 1976).

Bush (1976) found men in her sample who had purposely chosen areas of nursing where identity conflicts were reduced, such as anesthesia, operating room nursing, psychiatric nursing, or hospital administration. In some cases, the feminine image bothered men nurses, while others complained that they received differential treatment (Bush, 1976).

A change in the attitudes of female nursing colleagues toward men nurses appears in recent research. Bush's respondents found their female classmates in nursing school supportive and claimed that they were often given favored treatment (1976). Greenberg and Levine received similar responses from their sample (1971). In both studies, the resistance from female nurses was most often from older women. This finding was in contrast to a later study by Fottler (1976), who found older women nurses and those with more extensive contacts with men nurses, more positive in their attitudes. Fottler points out the weakness of the conclusions reached in other studies, as they had been determined through studies of the perceptions of men nurses rather than by a sampling of

female nurses' attitudes (1976). In addition, Fottler found that most female nurses would like to see more men in nursing. From his study, Fottler concluded that barriers to men in nursing are primarily found in the disincentives to enter the profession, rather than in any female resistance factors (1976).

Responses of faculty members and nursing school administrators to men nursing students have been examined in several studies. Schoenmaker (1976) cites opinions from several nurse educators, that lead him to believe that the minority status currently applied to men nursing students, has influenced admission policies so that preference is being given to less qualified men students. Faculty in this review complain that men students tend to be more technical in orientation while neglecting theoretical and communication emphasis. While such views are not well substantiated in the article, they serve to emphasize that there are firm attitudes, expectations, and concerns about men in nursing by faculty. While condemning the practice of preferential admission of men into nursing schools, Schoenfield stresses the need for more male nursing faculty members to serve as role models in nursing. This recommendation was also found in the survey of men nurses by Rogness (1976).

Acuff (1977) found differing sex-role expectations for men and women nursing students among the baccalaureate nursing faculty in four different schools. Faculty were

asked to rate their expectations for a male, a female, and an unspecified nursing student on the Broverman Stereotype Questionnaire. While expecting men to be more masculine than their female peers, they tended to rate the unspecified nursing student with more positive masculine stereotyped attributes (independence, less excitable in minor crises, more able in decision-making), and such positive feminine characteristics as neatness and interest in their own appearance. Female nursing students were expected to have more of these attributes than male nursing students. More masculine items were considered to be desirable in a nurse than feminine items, yet faculty expected the male nurse would possess negative male attributes and be "less active, less intelligent, more reckless, less tactful, and less aware of the feelings of others" than women nursing students (Acuff, 1977, p. 137). The paradoxes between sex-typed expectations and the attributes selected by faculty were puzzling. concluded that nurse faculty do not expect either male or female nursing students to reflect their sex-appropriate They also tend to identify a nurse as female stereotypes. unless specifically instructed otherwise. Finally, nurse faculty appear to expect men nursing students to have less socially desirable personality characteristics than female students. The findings, according to Acuff, reflect a prejudice that expects men nursing students to be effeminate and less suited to the profession than female nursing students (1977).

The literature portrays the man nurse as receiving differential treatment. In some cases the treatment is preferential (Bush, 1976; Greenberg & Levine, 1971), and in others it is discriminatory (Acuff, 1977; Etzkowitz, 1971; Foote, 1980; Segal, 1962; Silver & McAtee, 1972). tings where women nurses hold traditional values about the superiority of men, men nurses are often moved quickly into leadership positions (Etzkowitz, 1971; Levinson, 1976b). Levinson points out that even with the proportion of men at around two percent, they are found disproportionately in administrative positions (1976b). Sexism, with women thinking they are of less value than men, is attributed as the causative factor in these findings. Auster claims, "in significant ways women are a majority who occupy a minority status in our society and have internalized male stereotypes about themselves" (1979, p. 24). The results of such a view is that some female nurses believe that male nurses can be better supervisors or leaders simply by virtue of their sex.

Some discriminatory treatment of man nurses may be the result of "backlash" of women nurses who perceive that men have always received preferential advantages over women. Silver and McAtee speculated that some women see nursing as one of the last bastions of female success and are hesitant to turn it over to males (1972). Fottler found his sample of female nurses in disagreement with any notion that men were able to perform better than females or that they should

receive any preferential treatment in promotions or salary (1976). The subjects that were most negative were younger nurses who expressed that, while they are willing to accept men nurses as equal, they "are quite unwilling to accept them as more than equal" (Fottler, 1976, p. 108).

Studies of differences in characteristics between men and women nurses are few. Mannino (1963) found that the median age of men nurses was 37.1 years. Over 70 percent were married and of those, 73.2 percent were married to Aldag and Christensen (1967) found that male and female nursing students had similar personality characteristics as measured by the Minnesota Multiphasic Personality Inventory (MMPI). Both male and female nursing students were more passive and dependent, were less aggressive and rebellious, than an equal number of men and women junior college Male-Female scales on the MMPI showed both male and female students in nursing to have more feminine characteristics and interests than the junior college group. findings are consistent with the study by Grygier (1956), who found fifty percent of her sample of 14 male nursing students scored feminine on the Dynamic Personality Inventory. must be pointed out, however, that these studies utilized bipolar measures of masculine and feminine characteristics. Nursing students of either sex would be likely to endorse characteristics that reflect caring, compassion, sensitivity to others, and ability to follow orders. Since bipolar

instruments force the choice between masculine and feminine items, such inventories may make a care-conscious person appear more feminine than he or she may actually be.

Stromborg (1974) found the sex-role identity of her subjects made a difference in their "total image" of nursing. Those with masculine identities scored higher on total image scores, and endorsed characteristics that were more consistent with today's image of nursing being advanced by the profession. Again, her measures were obtained by a bipolar instrument so that an androgynous trend could not be detected.

Ziegler (1977) used the Personal Attributes Questionnaire, an instrument that reveals androgyny, to study correlations between sex-type, nurse role expectations, satisfaction with occupational choice academic achievement, and selfactualization. Sex-type or sex-role identity, was associated with only one of the dependent variables: nurse-role expectations. Junior nursing students, who were predominantly androgynous or feminine, classified the typical nurse role as androgynous. Seniors, who were undifferentiated as a group, classified the typical nurse as undifferentiated. Academic achievement differences were primarily found between classes with junior males scoring higher grade points than senior males. However, senior females scored higher in grade points than junior males. Ziegler points out that she did not control for intelligence in her attempt to correlate sex-role identity with achievement (1977).

The introduction of orthogonal measurements of sexrole identity make it possible for a more meaningful analysis of personality characteristics at a time when traditional sex-specific barriers are being questioned. Already researchers are finding a different commitment to a nursing career among women. From the traditionally feminine values of working only until they can find suitable husbands (Hall, 1977), to the more professional lifetime career orientations (Fottler, 1976) women nurses are changing their views toward power in the profession (Bowman & Culpepper, 1974). While the androgynous nurses, both male and female, seem the best equipped to deal with the power-related questions of independence and autonomy, as well as the compassion, caring, and nurturant needs of nursing, there is little documentation that this is true. Researchers have called for more evidence about the relationship that sex-role identity plays in the effectiveness of a nurse's performance (Till, 1980; Ziegler, 1977).

Historical Context of the Literature Review

Interestingly, the abundance of sex-role literature, the development of social learning theory, and the focus of societal concern for sex discrimination in schools and occupations, has been primarily an endeavor of the last twenty years. Prior to that time, differences in behavior and sex-specific characteristics were regarded by psychology largely as an inevitability of drives and "human nature."

The field of sociology, according to Hochschild (1973), has also observed its major impetus since 1960.

Nearly every article and review of sex-role literature includes an acknowledgement of the role the 1960's played in the advancement of interest and research in pluralistic concerns. Termed a "decade of upheaval" by Chafetz (1978, pp. 229-240), the 1960's saw both men and women becoming active in social movements that challenged the status-quo. The Women's Liberation Movement and the Civil Rights Movement added power to the investigation of inequities, while the "flower children" of the hippie movement escaped the sexbound traditions of dress, hair-styles, and sensitivities. These changes permeated the values, attitudes, and behaviors of more conservative segments of the population as well.

The literature has not been free of sexist bias, however, even in the study of sex-roles and behavior differences. The use of instruments that are biased or researchers who are themselves culturally sex-stereotyped, are among the problems cited by Hoyenga and Hoyenga (1979, pp. 17-20). Other biases have come from subject selection and the tendency for positive findings to be selected for publication.

The nursing literature concerned with occupational sex-typing and sexism also reflects the historical incidence and awareness of the liberation movement. Women's issues are virtually ignored in a popular nursing history text of the mid 1960's (Jamieson, Sewall, & Suhrie, 1966). A text on

professional nursing trends published during the same period, speaks to the problems encountered by men in the field of nursing, but omits any reference to sex-role conflicts experienced by women nurses (Spalding & Notter, 1965).

Although social scientists had found the sex-role conflicts of nurses an interesting area of research for nearly a decade before (Davis & Olesen, 1963; Schulman, 1958; Segal, 1962), the emergence of concern within the profession appears with the 1970's (Ashley, 1976; Bullough & Bullough, 1975; Cleland, 1971). With this concern has come the proliferation of articles, position-papers, and books cited in the preceding literature review. Like society at large, the most recent historical text is more open, confrontive, and willing to look at the issues of sexism, discrimination, and human rights in an analytic way than were its counterparts in earlier days (Kalisch & Kalisch, 1978).

Today, the relaxation of sex-role barriers has been accompanied by only a slight increase in the numbers of men entering the nursing profession. With the percentage remaining fairly constant for the first half of the century at around one percent, the 1977-1978 figures of 2.1 percent men in the profession does represent a positive but small gain ("Inventory," 1980). Those in the profession who are optimistic at the slight increase in men entering nursing schools hope that as numbers grow, other men will be attracted to the profession.

Application of Selected Concepts to the Study

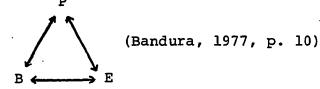
The theoretical framework for this study was derived from the literature concerning social learning theory. cial learning theory and its related concepts are based upon the view that many human characteristics are socially learned The view that such features are learned responconstructs. ses, thus amenable to change, holds considerable utility for the teachers of adults. As a framework for studying the complexities of individual identities and social acceptance in a sex-segregated profession, social learning theory offers an analytic approach to the interrelation of self, behavior, and environmental factors. This view, in its more recent conceptualization by Mischel (1973) and Bandura (1977), emphasizes the importance of social shaping and reinforcements, yet recognizes the interaction effects of cognitive and emotional factors in altering the outcomes of socialization.

Bandura views the individual as capable of learning to interpret his or her environment in more meaningful ways: to use observations of vicarious experiences of others to make wiser choices or predict outcomes (1977, pp. 1-15). Thus, the individual is neither driven by inner compulsions or "buffeted by environmental stimuli." Instead, there is an interaction of reciprocal determinism, where personal factors, behavior, and environmental influences serve as interlocking determinants; each acting on the other (Bandura, 1977).

This approach is represented in the following model, where B signifies behavior, P the person, and E the environment.



Bandura's Model of
Reciprocal Determinism



On some occasions, environmental factors may strongly constrain or influence behavior, while in other situations the personal factors may rule over those from the environment. Behavior may elicit personal responses, such as pride or embarrassment, or environmental responses such as praise or punishment. Either or both play a part in reinforcing the repetition or avoidance of the behavior in the future.

Among the earliest experiences in a child's development to elicit societal shaping are those related to sexrole acquisition. The wide range of subtle and complex traits, behaviors, and mannerisms are taught by direct tuition and through modeling by adults. The more hazardous, costly, or serious the consequences of mistakes are, the more likely the behavior is to be taught by strict modeling or observational learning instead of trial and error (Bandura, 1977, p. 12). In terms of sex roles, one could assume that the more crucial "sex-appropriate" behavior is perceived by parents, the more likely the behavior is to be taught by sex-typed models or the use of rigid stereotypes.

Using Bandura's interactionist model, the performance by a male child of cross-sex behavior, perceived by parents as feminine, may elicit positive, negative, or no response. A strongly negative response may inhibit the behavior but have a variable effect on the child personally. The child's cognitive interpretation of the behavior and its consequences will determine if and when he chooses to perform it again. If he decides that feminine behavior not only elicits bad outcomes, but is inherently bad, he may feel uncomfortable if forced to perform it, and he will try to avoid it in the future.

Research strongly supports the view that subjective feelings influence motivation to perform or avoid behavior (Bandura, 1977; Bem & Lenney, 1976). Even when reinforcements or incentives seem great, it is not the incentive itself, but what a person thinks of the incentive that makes the difference. As the child grows to adulthood, self-reinforcement tends to be modified by self-evaluation that is closely tied to the values learned throughout a lifetime. Individuals follow acceptable or prosocial types of behaviors as long as they derive self-satisfaction from them. Likewise, they tend to avoid antisocial behavior when it produces self-devaluating outcomes (Bandura, 1973, p. 316).

The literature supports the view that societal models in books, movies, and television portray an image of male power where competition and striving lead to rewards and

recognition (Brooks-Gunn & Matthews, 1979, p. 194; David & Brannon, 1976, p. 49).

The same research shows that men who reject masculine behaviors receive social ridicule and isolation. Meanwhile, females are taught that their rewards come from the efforts of others so they learn to value affiliation and approval from those who support them.

Females who acquire masculine mannerisms and reject femininity tend to show high achievement motivation but do not receive the same affiliation as more feminine women (Kristal, Sanders, Spence, & Helmreich, 1975). Still, toleration of cross-sex behavior is more lenient for women, and the aspiration to enter a male-dominated profession is considered lofty. Men, on the other hand, provoke a skeptical response when they aspire to enter a female-dominated field such as nursing (Levinson, 1976a; Segal, 1962).

Depending upon the individual's perceptions of the role expectation the sex-typed career demands, their congruence with his own sex-role identity or self confidence, and the perceived social consequences the occupational choice will elicit; a man may choose to join or avoid the nursing profession. Some of these social cues a man learned as a child: girls receive "nurse kits" as toys, while boys receive "doctor kits," nurses are portrayed by women in books and movies, and his own health care may have been delivered exclusively by female nurses. A subtle factor of omission

may have also influenced an avoidance of nursing by men, in its conspicuous absence from career oriented materials for children and adolescents. As a result, many men do not realize such a career is even an option until they find it modeled in the military service (Bush, 1976).

Men who are nurses have given a variety of reasons for entering the field: "job security and opportunity, interest in the biological sciences, and a desire to work in a humanistic field" (Bush, 1976). Some men choose nursing because they lack either the money, the ability, or the time to pursue training as a doctor (Bush, 1976; Greenberg & Levine, 1971). The wide variety of specializations in nursing seems to enable a man nurse a choice, either to "escape" typically feminine associations by seeking less nurturing roles (administration, anesthesia, emergency room nursing), or to integrate them in a combined instrumental-expressive way (Greenberg & Levine, 1971).

The variety of reasons given for entering nursing makes it probable that nursing would include men of masculine, feminine, or androgynous sex-role identities. The fact that the profession is seen by society as feminine would tend to make the field unattractive to the strongly masculine male, yet some who initially wish to be doctors may rationalize away this factor.

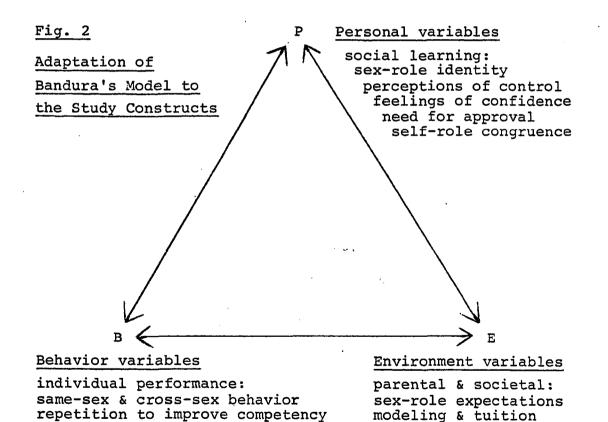
The androgynous person appears to hold the expressive yet instrumental qualities that encompass the ideal nursing

role advanced by today's nursing leaders (Stromborg, 1974). The androgynous man nurse would predictably hold perceptions of control over his own destiny as well as a supportive and favorable attitude toward women as coequals (Akin & Johnson, 1980; Minnigerode, 1976).

Based upon the Bandura model, it was predicted that the selection of nursing as a career was related in part to a man's sex-role identity. It was further predicted that because the nursing role is feminine sex-typed, there would be more androgynous men in nursing than in the population at large. Finally, it was expected that the androgynous men would hold more internal control perceptions than either men or women who were not androgynous. As internals, they would be acutely aware of contingencies and would consequently gain confidence from any increase in their competencies.

Although not addressed in the study itself, the increased competencies of men in nursing would, according to Bandura's model, lead to more favorable societal opinions about men nurses. As stereotypic models of men nurses are replaced with living individuals, societal perceptions of nurses in general will change. Just as the role of fathering in this decade has permitted more nurturant and sensitive child care functions; nursing roles may be seen by society as appropriate for both men and women. In both cases, the performance of living models, performing competently, tends to alter societal response and even elicit positive rewards. If

these rewards are perceived by men to include approval, as well as financial remuneration, the numbers of men in the profession would be expected to increase. Meanwhile, as representatives of a small minority, the man nurse was expected to feel the weight of learning "to be" without the benefit of role models. Conscious of the stereotypic opinions held by many people, the man nurse was expected to recognize that his performance was a role model to others. These conceptions and the constructs of the study are represented below in an adaptation of Bandura's model:



reinforcements & rewards

competency leading to achievement

The arrows in the model represent mediating forces, either negative or positive, yet the reciprocal determinism in each dimension does not require that a negative force necessarily causes a negative response. A poor performance of a behavior may cause a person with an internal locus of control to "try harder" if the person perceived failure to be a result of lack of effort. Likewise, negative social sanctions against a behavior may actually make it attractive to some individuals who desire recognition for "being different" (Bush, 1976). Since the way a person perceives failure or success is, in the social learning view, a product of learned contingencies and experience, the interaction between behavior and environmental reinforcements are seen as mutually interlocked with these perceptions.

Based upon this view, the man in nursing could find his career consistent with a masculine self-perception if he viewed the profession as more masculine than does society at large. The feminine sex-typed man likewise may align the nursing role more closely to his own self-perceptions. Contrasted with either the strongly sex-typed masculine or feminine man, the androgynous man in nursing would be expected to view the nursing role as androgynous: a view that selects situationally appropriate behaviors from both masculinity and femininity to provide a wide range of individual flexibility. This view, in addition, is consistent with the caring, nurturing, assertive, problem-solver role currently being advanced by the nursing profession (Schulman, 1972).

CHAPTER III

METHODOLOGY

Subjects

The study sample consisted of men and women nursing graduates of the University of Oklahoma, who received baccalaureate degrees during the period from 1973-1980. A substantive curriculum change occurred in 1971, which created a markedly different learning environment from the previous program. The study sample, therefore, was drawn from graduates of the revised curriculum beginning with the first graduating class of 1973, and ending with the last class to graduate prior to the study in 1980. From this group, 30 men (roughly one third of total males in the study population) and 30 females were randomly selected.

From the selected sample, 26 men and 26 women participated in the study by returning a complete research question-naire packet. Subjects ranged in age from twenty-three to forty-eight years. The sample included subjects of the following race or ethnic origin: two females and one male American Indian, one male of Spanish descent, two Black females, and the remainder Caucasian. Each graduating class

of the revised curriculum was represented in the random selection, and the sample was judged to be representative of the study population.

Procedures

A questionnaire packet was mailed to subjects, along with a cover letter explaining the relevance of the study to nursing and the learning environment of nursing students (Appendix C). Subjects were assured of confidentiality and instructions for returning the packet were included. Subjects were offered a small remuneration (\$3.00) for their participation in the study. Informed consent forms were obtained, in compliance with the University Health Science Center guidelines (Appendix C). A stamped, self-addressed envelope was included to facilitate return of the questionnaires. All addresses were ascertained to be correct through State Nursing Board listings, school Alumni rosters, and telephone verification of respondents and their families.

Within three weeks, twenty-five questionnaires were returned. Follow-up letters containing self-addressed postal cards were sent to the remainder of the nonrespondents. By six weeks after the initial questionnaire mailing, ten additional responses were received. At that point, follow-up telephone calls were made to the remainder of the nonrespondents. Only one person, a female, was unable to be reached by telephone. Eight persons requested duplicate question-naires because the initial packet had failed to arrive or had

been misplaced. By nine weeks, the total respondents numbered 52, slightly more than an eighty-six percent return. The respondents represented an even split of men and women. No questionnaires were returned by the postal service as undeliverable.

Subjects were asked to complete a biographical inventory and three instruments (Appendix C): the Graduate Nurse Questionnaire, the Bem Sex-Role Inventory (BSRI) for "self" perceptions, the Bem Sex-Role Inventory (BSRI-N) for "ideal nurse," and the Rotter I-E Locus of Control Scale. The Rotter I-E Scale was ordered in the packet between the two BSRI forms to assist in diminishing an "order effects" of administering identical inventories.

The Graduate Nurse Questionnaire

Questions were developed for a biographical questionnaire by the investigator in three phases: through interviews with six men nurses using simple directive questions
about career choice influences; followed by revision and construction of a more formal interview format used with six
more directed interviews; and finally the revised questions
were compiled in a printed questionnaire to be included in
the subject's packet.

Questions in the Graduate Nurse Questionnaire were aimed at five major areas of interest and served to better define the characteristics of the study sample. These areas were the subject's educational and experiential background,

family background, professional models or influences, career satisfaction, and professional sex-role awareness and attitudes.

In addition to providing characteristics of the sample, the questionnaire provided several variables for statistical analysis. These variables included gender, age, date of nursing school graduation, birth order, and parents' educational and occupational background.

Other variables believed to be related to models or influences in career choice were: spouse or family members in nursing or health fields, influence and attitudes of friends and family, assistance from school counselors, age of career decision, knowledge of career specialties, faculty and other nursing role models.

Career satisfaction variables included: negative or positive factors in nursing, future career goals, reasons for support or non-support of spouse or children in nursing career choice, influence on others to become a nurse, and whether the subject would choose nursing again as a career.

Professional sex-role attitudes and awareness variables included: age of first awareness that nursing was a career option for men, supportiveness of male family members to become nurses, problems encountered by men and women in nursing because of their respective genders, and subject's awareness of differences in the ways patients, nursing personnel and physicians treat men nurses. Finally, subjects

were asked to suggest ways that recruitment and retention of men nursing students could be improved by colleges of nursing.

The Bem Sex-Role Inventory

The BSRI has been used since its development in 1974, by a number of investigators who have related sex-type to other relevant variables: self-actualization, locus of control, cross-sex behavior avoidance, parenting, and other attitudinal dimensions (Beere, 1979, pp. 108-113). The inventory presents sixty adjectives, and respondents are asked to rate themselves on each description with a seven point scale, ranging from "never or almost never true" to "always or almost always true." Of the adjectives, twenty are masculine, twenty are feminine, and twenty are neutral in nature. the basis of the subject's responses, each person receives a masculine score, a feminine score, and a classification of sex-role identity. The latter is determined by comparing the subject's masculinity and femininity scores with the median masculinity and femininity scores of the normative sample. Based on the normative data provided by Bem (1978), the medians are 4.90 for femininity and 4.95 for masculinity.

Table 1 demonstrates the classification system for determining the subject's sex-role identity based upon the relationship between the median raw scores of the normative sample and those of the subject. When the femininity score alone falls above the normative median, the subject is classified as feminine. Likewise, when only the masculinity

score falls above the normative median, the subject is classified as <u>masculine</u>. However, when both masculinity and femininity scores fall above their respective medians, the subject is classified as androgynous. The subject who scores below the medians of the normative sample on both masculinity and femininity is classified as undifferentiated (Bem, 1979).

Bem emphasizes that the androgynous person is the individual with both masculinity and femininity scores that are high. The person with low scores in both dimensions, while not sex-typed, does not demonstrate the high self-esteem, independence, and nurturance found in the androgynous person (Bem, Martyna, & Watson, 1976). Normative data appear in Table 2.

The Ideal Nurse Survey (BSRI-N)

An adaptation was made in the Bem Sex-Role Inventory with permission of the publishers (see Appendix A), which altered the instructions and appearance of the instrument. Subjects were instructed to score a list of sixty adjectives in an inventory titled Ideal Nurse Survey, with ratings they considered most important for a person in nursing. Although the adjectives were identical to the original BSRI and the seven point scale of rating was the same, the printing and format was changed to diminish order effects of identical inventories (see Appendix C).

TABLE 1

CATEGORIES OF SEX-ROLE IDENTITY BASED ON

RELATIONSHIP OF SUBJECT'S SCORES AND NORMATIVE SAMPLE MEDIANS

Masculinity Score

Below Median Above Median

Femininit Score	Below Median Y	Undifferentiated (low-low)	Masculine (low femhigh masc.)
	Above Median	Feminine (high femlow masc.)	Androgynous (high femhigh masc.)
/Pom 197	0 - 21		

TABLE 2
NORMATIVE DATA FROM BEM'S 1978 SAMPLE

Means, Medians, and Standard Deviations for Scores on BSRI

Dimension Measured		Males (N = 476)	Females (N = 340)	
Femininity: Mean		4.59	5.05	
	Median*	4.60	5.10	
	s.d.	.55	.53	
Masculinity:		5.12	4.79	
	Mean Median*	5.10	4.79	
Femininity-	s.d. minus-Mascul	.65	.66	
	Mean	-6.33	6.30	
	Median	-6.50	6.83	
	S.D.	13.73	13.35	

Percentage of Subjects in Each Sex-Role Category

	Feminine	Masculine	Androgynous	Undif- ferentiated
Males (N = 476)	11.6%	42.0%	19.5%	26.9%
Females (N = 340	39.4%	12.4%	30.3%	17.9%

^{*}Femininity and Masculinity medians for combined group were 4.90 and 4.95, respectively.

The BSRI has been used in several studies as dual inventories for gathering different perceptions of "self" and "others." Support is gathered from these studies for the ordering of "self" prior to "ideal" in the administration of the questionnaires (Beere, 1979; Orlofsky, 1979).

Reliability and Validity of the BSRI

Test-retest reliabilities with an interval of four weeks, using twenty-eight college men and twenty-eight college women as subjects, were as follows: masculinity = .90 and femininity = .90 (Bem, 1974).

Internal consistency for two groups of college students in Bem's early normative study (1974), was estimated by using a coefficient alpha. The results were as follows: masculinity = .86 and .86; and femininity = .80 and .82 respectively for the two groups (Bem, 1974).

The validity of the BSRI was initially supported by Bem (1974) with two large groups of college students. Males (N = 444 and N = 117) scored significantly higher (\overline{X} = 4.97 and \overline{X} = 4.96) than females (N = 279 and N = 77; with \overline{X} = 4.57 and \overline{X} = 4.55) on the masculinity scale. Conversely, females scored significantly higher (\overline{X} = 5.01 and \overline{X} = 5.08) than the males (\overline{X} = 4.44 and \overline{X} = 4.62) on femininity scales. Further studies by Deutsch and Gilbert (1976), and Minnigerode (1976) have substantiated these differences established by the BSRI between genders.

The Rotter Internal-External Locus of Control Scale

The Rotter I-E Scale has been widely utilized as a measure to control perceptions. The scale consists of a twenty-nine item forced-choice social reaction inventory which also includes six filler items (Appendix C). Use of the instrument was granted by its author (Appendix A).

The scale is scored in the external direction, that is, "the higher the score, the more external the individual" (Lefcourt, 1976, p. 177). Previous studies have correlated sex-type with locus of control using both the Bem (BSRI) and the Rotter (I-E) Scale. One investigator found that sex-role stereotyped individuals were more external than those who did not hold sex-stereotyped role perceptions (Minnigerode, 1976).

Reliability and Validity of the Rotter I-E Scale

Test-retest reliabilities for the I-E Scale with time intervals from one to two months, using varying samples, have ranged between .49 and .83 (Rotter, 1966). Internal consistency estimates of reliability, ranging from .65 to .79, have been reported with most correlations occurring above .70 (Rotter, 1966).

Rotter (1966) also reported that the scale showed discriminant validity, by correlating poorly with such variables as intelligence, social desirability and political affiliation.

Although Rotter reported minimal sex differences on the I-E Scale, Feather (1967, 1968) found that English

college students that were female scored significantly higher in externality than males in the same group. Joe (1971) cites several studies that indicate sex-differences in social desirability factors may be responsible. Joe further shows that the relationship between locus of control perceptions and social desirability has been a contradictory one in recent studies.

The Rotter scale has been normed for various groups. While not specifically normed for graduates of baccalaureate nursing programs, female nursing students scored a mean externality of 7.14 (Lefcourt, 1976, p. 182). Males in psychology or social science classes were normed at externality scores ranging from 9.2 to 9.76, while administrators ranged in scores from 7.19 to 7.57 (Lefcourt, 1976, pp. 182-183). Generally in comparative studies, female norms run higher than male in externality, with younger and institutionalized persons more external than more mature and noninstitutionalized persons (Lefcourt, 1976, pp. 181-183).

Each instrument for the study required from ten to twenty minutes for completion, with the estimated total time of completion of the packet at one hour.

Design for Analysis of Data

The Statistical Analysis System (SAS), a packaged computer program, was utilized for the data analysis although the individual inventories and questionnaires were scored and tabulated by hand.

To test the first hypothesis, the BSRI sex-type scores of men nurses were determined for masculinity and femininity. Femininity-minus-Masculinity scores were determined for each subject and the three scores were used to determine group means for the sample to be compared with males in the normative sample (see Table 2). A sex-role identity category was determined for each subject based upon the relationship of the subject's femininity and masculinity scores to normative median scores: 4.90 and 4.95 respectively.

A two-tailed <u>t</u> test was used to determine if differences exist between masculinity scores, femininity scores and femininity-minus-masculinity scores, of men nurses and men in the normative sample. To further test whether the men nurses differed in sex-role identity from normative sample men, a chi-square test was done comparing proportions of men in each sex-role identity category: feminine, masculine, androgynous, and undifferentiated. Normative data (Table 2) was used to determine expected frequencies.

To test the second hypothesis, the mean I-E scores of all subjects in each of the four categories determined by the BSRI, and grouped by sex, were compared, Analysis of variance procedures were performed to determine if there are differences in level of externality among the four sex-types: feminine, masculine, androgynous and undifferentiated. The research question asked if androgynous men nurses would be more internal in their locus of control. With a significant

F value, the relationship would be supported.

The third hypothesis was tested by determining if individuals who are strongly sex-typed hold nursing role perceptions that are similarly sex-typed. Sex-typed perceptions for the nursing role were assessed by the BSRI-N, the Bem Sex-Role Inventory applied to the "ideal nurse." BSRI-N scores for femininity and masculinity were also used to categorize each subject's perception of the nursing role as either feminine, masculine, androgynous, or undifferentiated; based upon the relationship of feminine and masculine scores compared to the normative sample.

Congruency between the subject's sex-typed self perceptions and sex-typed nursing role perceptions was determined by a correlational analysis. Pearson product-moment correlation coefficients were determined for relationships between the BSRI self perceptions and the BSRI-N nursing role perceptions. A positive correlation between the two, on both feminine and masculine dimensions, would indicate congruency.

The fourth hypothesis was tested by grouping BSRI sexrole identity scores by gender. Femininity, masculinity, and
femininity-minus-masculinity scores of men and women nurses
were compared by application of two-tailed <u>t</u> tests. A chisquare test was done to compare proportions of men and women
in each sex-type category, and determine if there were more
androgynous men nurses than women nurses.

Variables

The first hypothesis utilized the independent variable of occupation, specifically <u>nursing</u>, to test its relationship to <u>androgyny</u>, the dependent variable. The hypothesis tested the research question: <u>if</u> men are nurses, <u>then</u> are they more androgynous than the normative male population?

The class variable <u>sex-type category</u>, as determined by the Bem Inventory (BSRI), served as the independent variable in the test of the second hypothesis: that androgynous men nurses will be more internal in their locus of control than non-androgynous men nurses. The level of <u>externality</u>, as determined by the Rotter I-E Scale, was the dependent variable in this test.

The class variable <u>gender</u> served as the independent variable, with <u>masculinity and femininity scores</u> as dependent variables, to determine if there are differences between the sex-role identities of men and women nurses. The class variable <u>sex-type category</u> served as dependent variable to the independent variable of <u>gender</u>, to test the research question: <u>if</u> nurses are men, <u>then</u> are they more androgynous than if they are women nurses?

Intervening variables, such as age, race, family occupations and education, and marital status were noted. Correlational procedures were done to determine their impact or relationship to the sex-role identity of the subjects. Random selection of subjects assured representativeness of the population in the study sample.

CHAPTER IV

ANALYSIS OF DATA

The data for the study were analyzed in three stages: hand scoring and coding of individual questionnaires and inventories, computer summarization for statistical analysis of sex-role identity variables between graduate nurse samples and the Bem normative samples, and computer analyses of differences between study variables of the men and women nurse samples.

In the first stage of data analysis, individual BSRI scores were computed from each subject's inventory. From this instrument, a femininity, masculinity, and femininity-minus-masculinity score was derived. Each subject's femininity and masculinity score was then compared to the median scores of the normative sample: 4.90 for femininity and 4.95 for masculinity. Subjects with femininity scores above 4.90 and masculinity scores below 4.95 were classified as feminine. Those with masculinity scores above 4.95 but with femininity scores below 4.90 were classified as masculine. Those with both masculinity and femininity scores above the normative medians were classified as androgynous, while those with both scores

below the medians were classified as undifferentiated. All BSRI scores and sex-role identity categories were coded for computer analysis of group characteristics.

Each subject's femininity and masculinity scores were converted to standard scores by using a table based on the Bem 1978 normative sample (see Appendix B). By subtracting the masculinity from the femininity standard score, the femininity-minus-masculinity score was obtained. This score, when highly positive, indicates a tendency to be strongly sextyped as feminine. When highly negative, the score indicates a tendency to be strongly sextyped as masculine.

The individual scores from the Ideal Nurse Survey (BSRI-N), an adaptation of the BSRI, were calculated in the same manner as BSRI scores for femininity, masculinity, and sex-type category. Sex-typed categories were determined by the relationship of subject scores for femininity and masculinity to the normative medians: 4.90 and 4.95, respectively.

Rotter I-E Scale responses were scored for each subject with one point given for each external response out of twenty-three possible locus of control items. The higher the score, the more external the individual's perceptions.

Each subject's Graduate Nurse Questionnaire responses were coded according to a response format. Coding of variables and assignment to a computer dictionary was done by the investigator and a trained assistant. The coded information was then entered as a data file in the University of Oklahoma

Health Sciences Center IBM 370/158 Computer System.

In the second stage of data analysis, scores and responses were summarized utilizing the Statistical Analysis System (SAS), a packaged computer system. Data were grouped by gender, and summarized for biological information, sexrole perceptions, I-E locus of control perceptions, and sextyped nursing role perceptions (see Appendix D).

Frequencies were determined for each sex-role identity category for comparison with the Bem normative sample. Chi-square analysis failed to demonstrate differences between nursing samples and normative samples of either gender (see Table 3).

Men nurses were then compared with the normative sample men for femininity, masculinity and femininity-minus-masculinity dimensions using a two-tailed <u>t</u> test. No difference was demonstrated between the two groups. In comparison with the normative sample women, women nurses were not significantly different on femininity, masculinity, or on femininity-minus-masculinity dimensions. The <u>t</u> values for each dimension, along with group means, are presented in Tables 4 through 6.

TABLE 3

Chi-Square Comparisons of Sex-Role Identity Distributions for Nurses and Bem's Normative Sample

		Men			
Sex-Role Category	Nurse Sample (N = 26)	Normative Sample (N = 476)	df	x²	P
Feminine	0	55	3	6.22	>.10
Masculine	9	200			
Androgynous	9	93			
Undifferentiated	8	128			

	W	omeņ			
	Nurse Sample (N = 26)	Normative Sample (N = 340)	<u>đf</u>	x ²	<u>p</u>
Feminine	10	134	3	4.83	>.10
Masculine	7	42			
Androgynous	6 .	103			
Undifferentiated	3	61			

TABLE 4 Student's \underline{t} test Between Femininity Scores of Nurses and Bem's Normative Sample

		····	·
Group	Mean	<u>t</u> Value	р
Men Nurses (N = 26)	4.64		
Men in Normative Sample (N = 476)	4.59	•50	> .10
Women Nurses (N = 26)	5.07		· · · · · · · · · · · · · · · · · · ·
Women in Normative Sample (N = 340)	5.05	.22	> .10

TABLE 5
Student's <u>t</u> test Between Masculinity Scores of Nurses and
Bem's Normative Sample

Group	Mean	<u>t</u> Value	<u>p</u>
Men Nurses (N = 26)	5.26		
Men in Normative Sample (N = 476)	5.12	1.23	> .10
Women Nurses (N = 26)	4.99	1 70	10
Women in Normative Sample (N = 340)	4.79	1.78	> .10

TABLE 6

Student's <u>t</u> test Between Femininity-Minus-Masculinity Scores of Nurses and Bem's Normative Sample

Group	Mean	<u>t</u> Value	₽	
Men Nurses (N = 26)	-7.62	64	> .10	
Men in Normative Sample (N = 476)	-6.33	04		
Women Nurses (N = 26)	3.42	-1.17	> .10	
Women in Normative Sample (N = 340)	6.30		•	

In the third stage of analysis, men nurses in the sample were compared with women nurses for differences in sex-role identity; femininity, masculinity, and femininity-minus-masculinity dimensions; I-E scores, and sex-typed nursing role perceptions.

Chi-square analysis demonstrated differences between sex-role identity distributions for men and women nurses.

Table 7 depicts the distribution and chi-square determination of difference.

TABLE 7

Chi-Square Analysis Comparing Sex-Role Identity Distributions

for Men and Women Nurses

Sex-Role Category	Men Nurses (N = 26)	Women Nurses (N = 26)	<u>df</u>	χ 2	<u>p</u>
Feminine	0	10	3	13.12	> . 0 0 4
Masculine	9	7			
Androgynous	9	6			
Undifferentiated	8	3			

Further chi-square tests of sex-role categories indicated that only in the category of feminine were differences significant. Women were both sex-typed and sex-reversed, while men had no cases in the feminine category. When subjects were regrouped into categories of "sex-typed" (either as sex-appropriate or sex-reversed) and "non-sextyped" (either androgynous or undifferentiated), men nurses were significantly less sextyped ($\chi^2 = 4.92$, p > .05).

Femininity, masculinity, and femininity-minus-masculinity scores of men and women nurses were compared by applying a two-tailed \underline{t} test. As is demonstrated in Table 8, there were no differences in masculinity scores.

TABLE 8

Student's <u>t</u> test Between Masculinity Scores of Men and Women

Nurses in Study Sample

Group	Mean	<u>t</u> value	<u>p</u>
Men Nurses (N = 26)	5.26	1.63	> .10
Women Nurses (N = 26)	4.99	1.03	

There were significantly fewer feminine items endorsed by men nurses, as is demonstrated by the significant difference in femininity scores seen in Table 9. The lower number of femininity endorsements by men subjects is reflected in the femininity-minus-masculinity scores. Men scored a higher mean sex-typed tendency toward masculinity in their "difference" score than did women nurses. These femininity-minus-masculinity differences are depicted in Table 10, with score means.

When compared to Bem's <u>t</u> score table (Appendix B), these standard score difference measures could not be classified as strongly sex-typed either for masculinity or femininity.

The BSRI score means and standard deviations for both genders in the study sample are listed in Appendix D.

Student's <u>t</u> test Between Femininity Scores of Men and Women

Nurses in Study Sample

Group	Mean	<u>t</u> value	<u>p</u> .
Men Nurses (N = 26)	4.64	2.12	000
Women Nurses (N = 26)	5.06	3.13	> .003

TABLE 10

Student's <u>t</u> test Between Femininity-minus-Masculinity Scores of Men and Women Nurses in Study Sample

Group	Mean	<u>t</u> value	<u>p</u>
en Nurses (N = 26)	-7.62	-3.48	. 001
omen Nurses (N = 28	3.42	-3.48	> .001

Differences in "ideal nurse" sex-typed perceptions were compared between men and women nurses by applying two-tailed \underline{t} tests to scores from the BSRI-N inventory. No differences were found in sex-typed nursing role perceptions of femininity ($\underline{t}[50] = .02$, $\underline{p} > .99$) or masculinity ($\underline{t}[50] = .60$, $\underline{p} > .55$).

Pearson product-moment correlation coefficients were determined for relationships between BSRI self-perceptions and BSRI-N perceptions of the nursing role. Correlations between self-perceptions and nursing role perceptions were positive for both genders. For men nurses, BSRI femininity scores and BSRI-N femininity scores were most closely correlated (.71, p > .0001). The confidence interval at 95 percent for the population rho, was established from .44 to .86. Masculinity dimensions on the BSRI were also positively correlated with BSRI-N masculinity dimensions for men nurses (.58, p > .002), with 95 percent confidence levels established between .25 and .79. Women nurses had BSRI self-perceptions of femininity that correlated with feminine nursing role perceptions (.44, p > .03), with confidence intervals at 95 percent set between .04 and .69. Masculinity selfperceptions were not correlated with masculinity dimensions of the nursing role for women nurses (.36, p > .07).

Cross-sex correlations of masculine self and feminine nursing role perceptions were negatively correlated at nonsignificant levels for both genders. Feminine self and masculine nursing role dimensions were also negatively correlated and non-significant for both genders. Coefficients are shown for self and nursing role correlations in Table 11.

TABLE 11

Correlations Between BSRI Self-Perceptions and BSRI-N Nursing

Role Perceptions by Gender

	BSRI Fem. &	BSRI Masc. &	BSRI Fem. &	BSRI Masc. &
Group	BSRI-N Fem.	BSRI-N Masc.	BSRI-N Masc.	BSRI-N Fem.
Men	.71**	.58**	.33	.47
Women	.43*	.36	.06	.10

^{*}p > .05, **p > .001.

Distributions in sex-typed categories for nursing role perceptions did not differ between genders. Only in one case did a subject perceive the role as feminine. Distributions and chi-square analysis findings are shown in Table 12.

TABLE 12

Chi-Square Analysis of Differences in Sex-Typed Nursing Role

Category Distributions Between Men and Women Nurses

Ideal Nurse	Men Nurses	Women Nurse:	s		
Sex-Role	(N = 26)	(N = 26)			
Category			<u>df</u>	χ²	<u>p</u>
Feminine	1	0	3	1.72	> .70
Masculine	11	13	•		
Androgynous	9	10			
Undifferentiate	d 5	3			

Differences between I-E locus of control scores for men and women nurses were not demonstrated by analysis of variance procedures (F = 1.08, p > .30). Further analysis of I-E scores by sex-role category found no difference between the externality of subjects of feminine, masculine, androgynous or undifferentiated sex-role identities, regardless of gender. These findings are presented in Tables 13 and 14. Means and standard deviations for I-E locus of control scores by gender and sex-type are listed in Appendix D.

TABLE 13

Analysis of Variance Comparing I-E Scores of Men Nurses in

Different Sex-Role Categories

Source of Variation	df	Mean Square	F Value	<u>p</u>
Sex-type Category*	2	19.52	1.42	> .26
Error	23	13.71		
Corrected total	25			

^{*}No men were in feminine category.

TABLE 14

Analysis of Variance Comparing I-E Scores of Women Nur

104

Analysis of Variance Comparing I-E Scores of Women Nurses in Different Sex-Role Categories

84 2.01	
2.01	> .14
36	
	36

Correlational analyses of age, birth order, mother's occupation, father's occupation, mother's education, father's education, and likelihood of entering nursing if given another chance; failed to show significant relationships to sex-role identity (see Table 15).

TABLE 15

Correlations Between Selected Personal Characteristics and Sex-Role Identity

	Age			Fath.			
Sex-Type	.18	.14	32	07	11	19	04

Biographical data not pertinent to the study were summarized for percentages by gender and are reported in Appendix D.

Tests of the Hypotheses

Four hypotheses were tested in this study, each arising from a research question. Each hypothesis will be presented, followed by the results of its test.

H₁ Men in nursing will reveal an androgynous sex-type.

This hypothesis was generated from the following research question: Have men in nursing resisted or overcome traditional sex-typing? The hypothesis was tested by comparing the sample of men nurses with a large normative sample tested by Bem (1978). The normative sample was considered "traditional" in sex-type by its consistency with numerous other samples gathered by Bem (1979). Chi-square analysis failed to demonstrate differences between men nurses and normative sample men in their representation in various sex-type categories ($\chi^2 = 6.23$, p >.10).

Results of two-tailed \underline{t} tests indicate there is no difference between masculinity scores (\underline{t} [500] = 1.23, \underline{p} > .23), or femininity scores (\underline{t} [500] = .50, \underline{p} > .62), or femininity-minus-masculinity scores (\underline{t} [500] = -.64, \underline{p} > .53) for men nurses when compared to the male normative sample. The results fail to support the hypothesis.

H₂ Where sex-type is androgynous, there will be a more internal locus of control.

This hypothesis was derived from the following research question: Do men in nursing bear out previous studies that show a correlation between an internal locus of control and androgyny? The hypothesis was tested by grouping men nurse subjects into sex-role identity categories and comparing I-E scores of androgynous men with those in other categories. An analysis of variance procedure showed no difference between the I-E scores of men in the masculine, androgynous, or undifferentiated categories; there were no cases in the feminine category (F = 1.42, p > .26). The results fail to support the hypothesis.

H₃ Where men reveal strong sex-typing, they will hold sex-typed occupational role perceptions that are congruent with their self-perceptions.

This hypothesis was generated from the following research question: Do men nurses avoid sex-typed role conflict by aligning occupational role perceptions to match their own self-perceptions? The hypothesis was tested by correlational procedures using the Pearson product-moment coefficient to determine the strength of relationship between sex-typed self perceptions and sex-typed perceptions for the nursing role. For men nurses, the endorsement of feminine self-perceptions was positively correlated with feminine "ideal nurse" perceptions (.71, p < .0001). There was also a positive correlation between self and ideal nurse perceptions of masculinity (.58, p < .002). The results support the hypothesis.

H₄ Men nurses will reveal more androgynous selfperceptions than will women nurses.

This hypothesis arose from the following research question: Because nursing is sex-typed as feminine, will more women in the profession be feminine sex-typed, as opposed to the men who have crossed over traditional lines? The hypothesis was tested by comparing the proportions of men nurses with those of women nurses in the four sex-type categories: feminine, masculine, androgynous, and undifferentiated. Chi-square analysis demonstrated differences between men nurses and women nurses in sex-type ($\chi^2 = 13.12$, p > .004). The difference was not a reflection of greater androgyny on the part of men, but rather one of greater femininity on the part of women. Also, more women were sexreversed (masculine) than were men (feminine). When subjects were regrouped into two groups: those who were sex-typed (masculine or feminine) and those who were not (androgynous and undifferentiated), the group of women were significantly more sex-typed ($\chi^2 = 4.92$, p > .05). The results fail to support the research hypothesis.

Other Findings

Correlational procedures were used to assess the relationship of birth order, mother's occupation, mother's education, father's occupation, father's education, and age to the subject's sex-role identity. None of these variables were found significantly related to sex-type. Subject responses to the question "would you choose nursing again?" were also not correlated with sex-type.

Biographical data were used primarily to better define the study sample and to provide more insight into the attitudes and problems identified by men and women nursing graduates (see Appendix D).

Personal Characteristics

The average age of the respondents was 30 years for men and 28.8 years for women. Seventy-three percent of men and seventy-seven percent of women in the sample were married. Eight percent of both men and women samples were divorced.

Family Background

The biographical summary was examined for trends or frequencies that would help explain the man nurse's capabilities to reject traditional occupational role barriers. None of the subjects had fathers in "non-traditional" occupations, but the majority of fathers were in skilled or professional work. Over half of the men nurses' mothers were employed during the subjects' childhood and adolescence.

Thirty-eight percent of the men's fathers and twelve percent of their mothers had graduated from college. More than half of the men were the only college graduates among siblings in the family.

Thirty-six percent of the men had married registered

nurses, although most had married after their career decision had been made. Eleven percent were married to other types of health care professionals.

Spouses were college educated with bachelors or advanced degrees in over half the men nurse sample.

Slightly over thirty percent of the men had family members who were nurses. In twelve percent this family member was the mother. Only one subject stated that another male member of his family was a nurse. Twenty-seven percent had family members working in other health-related professions.

The Career Decision

The average age that men in the sample claimed to be aware that nursing was a career option for men, was nineteen and one-half years. The average for considering nursing as a career for themselves was twenty-one and one-half years. The average age of final decision on nursing as their career was slightly over twenty-two and one-half years. The span of time from awareness to career decision averaged three years, which was markedly different for men than for women. Most women in the sample considered nursing as a career during adolescence, but were aware that nursing was a career option for them as pre-schoolers. The time span from consideration to career decision averaged four years for women compared to one year for men.

Influence of friends and family on the career decision

of most of the men nurses was strong, or at least supportive. Several men cited strong role models among friends who were men nurses and nurse anesthetists. Only one subject claimed to have non-supportive, non-influential friends and family. Twenty-two percent of the men had served in the armed services as medical corpsmen and had been introduced to the career possibility in this way.

The men nurses in the study cited the need for role models as a critical factor in recruitment in forty-six percent of the responses. Salary and the ability for advancement were equally rated as crucial factors.

The consideration of a specialty after completing nursing school was found in sixty-eight percent of the men nurse sample. Anesthesia school was most frequently cited at forty percent, and specialized care or specialized agencies constituting the remainder. Specialties of any type were anticipated by thirty-five percent of the women nurse sample prior to nursing school, and these tended to be special types of patients rather than specialized nursing skills.

Career Commitment

All men nurses in the sample were employed or active in some dimension of nursing. Two were full-time students and one employed only part-time, but the remainder worked full-time in hospitals, community health agencies, or for nursing personnel registries. In comparison, twelve percent of the women were unemployed, while sixty-five percent worked

at hospitals or community health agencies as staff nurses.

Forty-six percent of the men were employed as staff nurses.

In head nurse or supervisory roles, twenty-three percent of men were employed compared to fifteen percent of women.

Nineteen percent of men nurses had become nurse anesthetists, while four percent of women nurses were employed as nurse practitioners or clinical specialists.

Of the men sampled, eighty-five percent stated that specialized nursing is a part of their future career plans. Of those not already nurse anesthetists, another eight percent plan to enter that speciality. Eleven percent plan to pursue additional education in nursing administration. Nursing education, nurse practitioner preparation, or hospital administration were cited as other career options being planned. Nearly half of the men have already pursued additional formal education since graduating from nursing school. This varies from twenty percent who hold Masters degrees, fifteen percent who have attended a specialized non-credit program, to twelve percent who have taken graduate college courses.

When asked if nursing would be their career choice again, forty-six percent answered yes in the men sample.

Another eleven percent answered probably yes. Those answering no, were thirty-five percent; with eight percent undecided. These proportions did not differ drastically from those found in the female sample, except that more females said they would

not choose nursing again.

Views of Sex-Role Influences in Nursing

The majority of men respondents identified problems encountered by men nurses, related to sex roles. Many problems were seen by thirty-one percent, few were seen by fortysix percent, and no problems were seen by twenty-three percent of the men. Most problems cited were related to being misunderstood by patients, especially women patients. connotations of "queer" or "effeminate" were problematic for twenty-three percent, although they stated that these attitudes were not a problem among co-workers as much as among lay public individuals. Seventy-three percent found that physicians were more collegial and preferential to men nurses than to women nurses. None found physicians negative. Nineteen percent of men found that nursing personnel tended to misuse them for physical lifting and heavy work. men found their gender to be related to deferent treatment, with greater status and respect than that experienced by women nurses. Patients were seen by twenty-seven percent of men nurses, to be more deferent. Staff were seen by thirty-one percent to prefer men nurses. The acknowledgement of greater status and deference, is also ascribed to men nurses by the women nurse sample in similar percentages.

When asked if they would be supportive of a spouse's career choice in nursing, sixty percent of the men were

positive. Another eight percent answered yes, with reservation. Of those answering no, the rationale cited was related to poor salary, low status, and disorganization of the profession. Although the responses of men nurses might have been anticipated because nursing is a traditional career choice for wives, the women nurses' responses were nearly the same for husbands. The reasons for negative responses given by women were similar to those given by men, except for three women who expressed that nursing was sex-inappropriate for men.

When asked if they would be supportive of a son's career choice in nursing, sixty-nine percent of the men nurses answered yes. Another twelve percent were positive, with reservation. These responses were similar among women subjects.

Support of a daughter's career in nursing received identical responses from men as did the question about a son's career choice. The rationale given by men for negative responses was clearly related to the state of the profession: poor salary, low status, and low advancement possibility, not the gender of the child. Among women nurses, a greater acknowledgement of support was given for daughters than for sons entering nursing.

The role of counselors, advisors, and nursing faculty differed considerably between men and women nurses, and were perceived by both groups to be influenced by sex-role attitudes.

Neither the men or women nurse group attributed their awareness that nursing was a career option for men, to school counselors or college advisors. While over eighty percent of women nurses found school advisors helpful in giving realistic information about the nursing profession, only four percent of men nurses found this so. Nursing faculty were perceived by forty percent of women nurses to be "easier" on men nursing students, demanding less, and showing more deference to their opinions. Thirty-one percent of the men nurses claimed that a few nursing faculty seemed "rougher" on men students than on women students.

Contrary to several previous studies of men nurses (Etzkowitz, 1971; Rutledge & Gass, 1968; Segal, 1962), there were no expressions of feeling threatened in terms of self-concept of masculinity. There were a number of references to the ever-constant need to "explain who we are." One respondent claimed that the "petticoat Mafia" in nursing is active and will continue to make significant inroads into the profession by men difficult.

Biographical Trends

Although not intended as tests for specific study hypotheses, the information yielded by the biographical questionnaire has demonstrated several characteristics that better define the subject samples. The responses also raise questions for future research and analyses based upon the differences and similarities between the men and women

nursing population. Trends are suggested by differences in sex-role attitudes, spans between career awareness and career decision, and commitment to the profession.

Summary of Data Analysis

The analysis of data tested four hypotheses postulated by the study. Three of the hypotheses were rejected and one was supported. Results of the data analysis indicate that there is no difference between the sex-role identities of men in nursing and those of men in a large normative sample of young adult men. No difference was found between locus of control perceptions of androgynous men nurses and those with other sex-role identities. While men nurses differed from women nurses in sex-role identity by having fewer sex-typed or sex-reversed self-perceptions, men were not more androgynous than women in the sample. A significant relationship was found between the sex-typed perceptions of men nurses and their sex-typed perceptions of the nursing role.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The man in nursing has been faced with elements of myth, conjecture, and stigma for much of this country's history. These attitudes have been attributed by social scientists to the man nurse's "deviation" from society's perception of sex-appropriateness for the occupational role.

Sex-typed attitudes about the nursing profession can be found in diverse segments of the population, from preschool children to faculty in schools of nursing. The pervasive attitude is that nursing is feminine and that women are naturally better suited to it. The demands of the nurse's occupational role, however, are not solely feminine. characteristics currently being endorsed by professional nursing leaders call for assertiveness, independence, and problem-solving: qualities that have traditionally been considered masculine. Traditionally feminine qualities considered important for the nursing role are nurturance, compassion, and sensitivity to need. Characteristics from both sexes, used when the situation demands, seem most suitable for the nursing role being advanced by the profession at this time.

Based upon this view, the exclusion of one gender from the profession is unfounded. In addition to limiting the human resources available to the field, the sex-typing of nursing has been associated with continual power struggles related to the status of women.

Men entering the nursing profession have increased only slightly in number over the past two decades. While several studies have investigated factors that create this avoidance phenomenon, little attention has been given to the characteristics or mechanisms that have helped men cross over traditional sex-typed barriers. Such information could provide insight and improved rationale for nurse educators and recruiters planning strategies to increase enrollment and retention of men in the profession.

Summary

This study was designed to investigate factors that influence the man nurse's ability to negotiate the role strain and possible status contradictions exerted by a feminine sextyped profession. The investigator sought to determine if men in nursing differed from those outside the profession in sex-role identity. It was expected that men in nursing would be less sex-typed than normative sample men, in order to have resisted or overcome traditional avoidance attitudes toward nursing. It was also expected that those men nurses who were androgynous: able to perform both masculine and feminine

tasks without discomfort, would have greater control perceptions about their own destiny. Men nurses were expected to be more androgynous and less sex-typed than women nurses, since the profession is considered sex-appropriate by society for women. Finally, it was anticipated that those men who were sex-typed as masculine, had negotiated any sex-typed role conflict in nursing by perceiving the nursing role as congruent with their own self-perceptions.

A sample of 52 graduate nurses, 26 men and 26 women, were selected randomly from graduating classes spanning seven years. All were graduates of the same baccalaureate degree program which offered an innovative integrated curricular approach to nursing. Ranging in age from twenty-three to forty-eight years, the sample included two Black, three American Indian, one Hispanic, and forty-six Caucasian subjects.

Subjects completed and returned a biographical questionnaire and three study instruments: the Bem Sex-Role Inventory (BSRI); the Ideal Nurse Survey, an adaptation of the BSRI (BSRI-N): and the Rotter I-E Locus of Control Scale (I-E). Subjects were remunerated a small payment (\$3.00) for their participation in the study. Informed consent forms were obtained.

Data were analyzed in three stages. In the first stage of data analysis, individual scores for the BSRI, BSRI-N, and I-E inventories were computed by hand. Sex-role identity categories were determined for each subject's self-perceptions

and nursing role perceptions. Items from the biographical questionnaire were hand coded and entered along with inventory scores into a data file for computer analysis.

In the second stage of data analysis, scores and responses were summarized using the Statistical Analysis System (SAS), a packaged computer system. Data were grouped by gender, and frequencies determined for comparison with a normative sample of young adults. Chi-square analysis of independence failed to demonstrate differences between the men in the nursing sample and those in the normative sample for sexrole identity. No differences were found in femininity, masculinity, or femininity-minus-masculinity scores; between men nurses and the normative sample men when compared with two-tailed t tests.

In the third stage of data analysis, men and women nurses in the study sample were compared for differences in femininity, masculinity, femininity-minus-masculinity, and sex-role identities. Chi-square analysis demonstrated differences in sex-role identity distributions between men and women nurses. Differences, however, were significant only in the feminine category. When subjects were regrouped into sex-typed (either for same or opposite gender) and not sex-typed (either androgynous or undifferentiated), the men nurse group was less sex-typed though no more androgynous than the women nurse group.

Differences between I-E scores of men and women were

not demonstrated by analysis of variance procedures. Further analysis found no difference between sex-role categories in locus of control perceptions, either for women or for men.

Finally, Pearson product-moment correlation coefficients demonstrated significant relationships between the
sex-typed self-perceptions of men nurses and their sex-typed
occupational role perceptions. Positive correlations between
BSRI self-perceptions and BSRI-N nursing role perceptions were
also found for women nurses, although coefficients were not
as high.

Discussion and Conclusions

Based upon Bandura's recent conceptualization of social learning theory, it was predicted that the selection of nursing as a career was related in part to a man's sex-role identity. Because nursing has been sex-typed by society as feminine, it was expected that men in nursing would be less traditional in their sex-role identities. It was predicted that men in nursing would have self-perceptions that included both masculine and feminine qualities, as measured by the BSRI; that is, they would be androgynous. Results of the study did not support the expectation that men nurses were more androgynous than the non-nurse young adult normative male sample.

Several biographical factors and the high correlation between self and nursing role perceptions appear related to

this undexpected finding. The men nurses in the study, regardless of sex-type category, tended to see the nursing role as congruent with their own sex-typed self-perceptions. majority of the men nurses in the sample cited the role that living models played in their recruitment to the profession. The large proportion of men who anticipated nursing specialties and expanded roles after finishing nursing school, attributed their interest to their acquaintance with working members of the field; particularly men. While women subjects acknowledged familiarity with nursing roles, they tended to view them more traditionally and based upon lay-person's ideas prior to nursing school. These findings suggest that men who have chosed nursing as a career, experience less sex-role conflict than expected because they do not view their chosen field as inappropriate for men. They have instead found credible models in actual working situations. These findings further support the concept of role modeling as an important factor in influencing the approach of men to the field of nursing.

This study's findings are not consistent with earlier investigations that have found men and women nurses similar in sex-role identities, and more feminine than non-nurse normative samples. Two factors may be responsible. The instruments used in earlier studies were bipolar measures that forced a choice between masculine and feminine endorsements. The endorsement of nurturance, compassion, and sensitivity; all desirable qualities of a nurse, were considered feminine. The

forced-choice items may have made men nurses appear more feminine than the general population by not detecting their masculine perceptions. The orthogonal measures of the Bem Sex-Role Inventory and more recent instruments, allow both femininity and masculinity dimensions to be measured. The relative comfort with characteristics that are both feminine and masculine, has been found advantageous toward making an individual adaptive to a wide range of situations. Such an individual would be termed androgynous. Another category that would have gone undetected by bipolar sex-role measures was that containing persons with undifferentiated self-perceptions. This person, while no more sex-typed than the androgynous person, has not been found to be as adaptable or well adjusted.

The other factor that may possibly be responsible for inconsistencies between the findings of this study and earlier investigations, is the type of student being recruited into nursing today. Many earlier studies were conducted with subjects in diploma hospital-based nursing programs. Students differed in many respects from those found in general college or university populations. Today's baccalaureate student, particularly the man student, is recruited from already matriculating college students; often with considerable course work done in other majors. The findings of this study tend to support the suggestions made by Ziegler (1977) and Till (1980) that baccalaureate nurses may be more similar to general college or university graduates in sex-role identity, than to

nurses from diploma nursing programs.

Still another factor that may influence the findings in sex-role research today, is the generalized societal relaxation of many sex-role boundaries. Today's diploma nurse, if assessed with orthogonal sex-role inventories, might be determined to be less sex-typed than those in earlier studies because they reflect changing societal trends.

While this study did not find men nurses more androgynous than women nurses, there were significantly fewer who were sex-typed. More than half the men subjects fell into either androgynous or undifferentiated categories. This finding, while not supportive of the study hypothesis, suggests that at least half of the men sample did not have to contend with strong sex-role contradictions regardless of how the viewed their occupational role. There were also not wide divergencies between the men subjects' scores for masculinity and femininity, which suggests that even those categorized as sex-typed could not be considered strongly sex-typed.

An unexpected finding, was the large proportion of sex-reversed perceptions in the women nurse sample. This finding, however, is consistent with Bem's assessment of young women in the general population. It also suggests that women nurses, like men nurses, do not view the nursing role as traditionally feminine.

The expectation that locus of control would be related

to sex-role identity was not supported in this study. Several factors may be responsible for this outcome. First, there were not wide variations in sex-role endorsements for either men or women in the study. Further investigation of I-E differences among divergent sex-types in warranted. Also, a larger sample size may reveal a more significant trend and relationship between these two variables.

Recommendations

There is a need for more investigation into the factors related to occupational career choices, particularly in predominantly female professions. Some specific areas of investigation suggested by this study that impact recruitment of men into nursing are:

- The role that sex-typed models found in the media, school career-days, and children's games and toys serve in influencing approach or avoidance responses of men to feminine sex-typed careers.
- 2. The influence of positive men nurse role models, portrayed through public media, in modifying societal perceptions of sex-appropriateness for the nursing role.
- 3. The effect of recruitment programs in elementary through high school, that emphasize nursing specialties, leadership positions, and positions of greater administrative status.

The remarkable similarity between sex-typed nursing role perceptions of the men and women in this study arouses the question of the nursing program's influence in shaping the nurse's occupational images. Are, for example, innovative integrated curricular approaches associated with less stereotypically feminine views of the nursing role? The possibility that nursing programs are trying, and succeeding, in advancing less sex-typed images should be examined. If factors in curricula such as student support groups, mentors, faculty role models, or conscious efforts of nursing colleges are identified as instrumental through descriptive research; experimental tests should follow.

Replication of this study with other nursing groups should be undertaken to determine if locus of control measures are consistently unrelated to sex-role identity. Furexploration of the concepts of sex-role congruency with occupational role should also be done. Other measures of nurse effectiveness should be compared among nurses of varying sex-role identities to determine the value of promoting androgyny through the nursing curriculum and faculty development.

While this study's findings do not conclusively show that androgyny of individuals makes them cross over traditional sex-role boundaries more easily, the large number of men who were not sex-typed in the sample suggests further research areas. The study of applicants, prior to the nursing

school experience would contribute more toward understanding the characteristics that facilitate entry. Longitudinal studies of changes in sex-typed perceptions of self and
the nursing role that take place between entry and graduation should also be undertaken to further clarify the role
of the nursing school in shaping these attitudes.

The study indicated that non sex-typed and sex-typed nursing role perceptions are found among nurses of both genders, but tend to be congruent with the individual's self perceptions. The concept of androgyny, in terms of facilitating recruitment, needs further exploration. In addition, the concept needs more investigation before its influence on nurse-effectiveness can be established.

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APPENDIX A

LETTERS OF APPROVAL

ADAPTATION OF THE BSRI

USE OF ROTTER I-E SCALE

HUMAN EXPERIMENTATION COMMITTEE

CONSULTING PSYCHOLOGISTS PRESS INC. 577 COLLEGE AVENUE PALO ALTO, CALIFORNIA 94306

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THE COLLEGE OF LIBERAL ARTS AND SCIENCES Department of Psychology

September 30, 1980

Barbara J. Holtzclaw, R.N. 2627 Trenton Road Norman, Oklahoma 73069

Dear Ms. Holtzclaw:

You have my permission to reproduce the I-E Scale for your doctoral research, providing you are supervised by or consult with someone who is trained in the use and interpretation of personality measures.

Very truly yours,

Julian B. Rotter

Professor of Psychology

Julian B. Rother

JBR/isw



APPROVED: 09-29-80

HSC ID#1754

TITLE: The Man in Nursing: Relations between sex typed Perceptions and Locus of Control

University of Oklahoma at Oklahoma City · Health Sciences Center

Graduate College and Office of Research Administration

October 1, 1980

Barbara Holtzclaw Nursing

Dear Ms. Holtzclaw:

The Human Experimentation Committee reviewed the captioned application which will involve human subjects and approved the study. It is the opinion of this Committee that the rights and welfare of the individuals who are to be studied will be completely respected; that informed consent will be obtained in a manner consistant with the Code of Federal Regulations, Title 45, Part 46, "Protection of Human Subjects" of March 13, 1975; and that the risks to the individuals are so outweighed by the benefits to the subject and the importance of the knowledge to be gained that it warrants the decision to allow the subjects to accept these risks.

The Committee would like to call your attention also to the following obligations as Principal Investigator of this study. Under the terms of our approved Institutional Assurance to DHEW you must provide us with a progress report at the termination of the study, or at the annual anniversary date of the approval, whichever comes first. If the study will be continued beyond the initial year, an annual review by the Committee is required, with a progress report constituting an important part of the review.

Any substantive changes in the protocol such as a change in the investigator, procedure or number of subjects should be reported immediately to the Committee. These conditions are spelled out in detail in the Institutional Assurance under Item III, B 4 "Continuing Review of Research".

Finally, we urge you to review your professional liability insurance to make sure your coverage includes the activities in this study.

Sincerely yours,

Fletcher B. Taylor, Ir., M.D., Chai

APPENDIX B

STANDARD SCORES FOR BSRI BASED ON BEM'S 1978 SAMPLE

															
1	Table 1				i	Table 2.									
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12		2.55	1	15	62		5.55		59	36	19	37 50	74	+32	71
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15		2.75		18	66		5.73	1	62	39	-15	40	77	+36	7.4
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APPENDIX C

SUJBECT'S QUESTIONNAIRE PACKET

COVER LETTER

CONSENT FORM

GRADUATE NURSE QUESTIONNAIRE

BEM SEX-ROLE INVENTORY

ROTTER I-E SCALE

IDEAL NURSE SURVEY

FOLLOW UP LETTER



**University* of Oklahoma at Oklahoma City* · Health Sciences Center

College of Nursing

Dear O.U.C.N. Graduate:

I am writing to request your participation in a study I am conducting as part of my doctoral dissertation project in the area of Adult Learning.

As you are aware, the representation of men in our profession is very low. As a part of that concern, I am interested in learning more about factors that facilitate and attract men into nursing. By studying the differences in the masculine and feminine perceptions of men and women who are registered nurses, I hope to find data that will help our program and others resist traditional sexism in recruitment and teaching.

Since the sample size for the project is relatively small, your participation is of great importance to its success. Please be assured that your responses will be treated confidentially and data will be reported as group means instead of individual scores. Should you decide not to participate or to withdraw your participation at any time, you will be free to do so without any obligation and your data will not be included in the results. To aid in assuring your anonymity, do not write your name on the test inventories. Sign only the consent form, which will be separated from the packet on its receipt.

Knowing that your time is limited, I would like to repay you in a small way for your participation. A check for \$3.00 will be mailed to you on receipt of your completed questionnaires. Please be sure to sign the consent form. In addition to providing the ethical assurance that you have agreed to participate, it will provide me a means to make sure you receive your check.

Please return the packet as soon as it is completed in the enclosed stamped envelope. In case you have additional questions concerning this project, please call me at 329-5596, or write me at 2627 Trenton Road, Norman, Oklahoma 73069.

Thank you for your cooperation and help.

Sincerely,

Barbara J. Holtzclaw, R.M., M.S.

Associate Professor, College of Nursing

Doctoral Candidate, College of Education

CONSENT TO PARTICIPATE

Ι,	, have agreed to participate in the study	
entitled	i "The Man in Nursing: Relationships Between Sex-typed Perception	S
and Locu	us of Control" conducted by Barbara J. Holtzclaw, R.N., M.S. I	
have rea	ad the instructions for completing the questionnaires and underst	and
that the	e data collected in this study is to be used for research purpose	:S
only. 1	I further understand that findings will be reported only as group)
data and	i I will remain anonymous. I will not be required to identify my	/ -
self in	any way on the questionnaires.	
I unders	stand that the purpose of the study is to investigate differences	; ·
between	masculine and feminine role perceptions and related personality	
characte	eristics held by men and women in nursing.	
For my p	participation in the study, I will expect to receive \$3.00.	
Since th	nere are not physical hazards posed by this research, no injuriou	ıs
effects	of this study are anticipated. It is clear to me that no medica	l í
compensa	ation will be available to me from the University of Oklahoma or	
its empl	loyees unless I otherwise qualify for such employee or student	
benefits	s. If I choose to withdraw or not participate in the study I an	n
free to	do so, and my scores will not be included in the results.	
I under	stand that if I have any questions or desire further information	
concern	ing the availability of compensation or medical treatment, I may	
contact	the Director of Research Administration, University of Oklahoma	
Health :	Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma. Telepho	one
(405) 2	71-2090.	

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GRADUATE NURSE QUESTIONNAIRE

<u>Instructions</u>: Please read each question, then check or fill in the blank as <u>indicated</u>. Then proceed to the attached questionnaires. After completing the entire set of questionnaires, place them and your signed consent form into the enclosed stamped envelope and reutrn them by mail to the investigator. Thank you.

1.	Age Birthplace Race or ethnic group
2.	Male Female .
3.	Number older brothers Younger brothers Older sisters Younger sisters .
4.	Mother's highest educational level If college what major?
5.	
6.	Father's highest educational level . If college what major?
υ.	Brothers' highest educational level,
7	If college what majors?
7.	Sisters' highest educational level,,
_	If college what majors?
8.	Mother's occupation . How long? Was your mother
	employed in this occupation during your childhood and/or adolescence?
	If not, what type of work outside the home did she do?
9.	Father's occupation During your childhood and/or adolescence
	was he ever employed in other occupations? If so what were they?
ιο.	Are any of your family members registered nurses? . What are their re-
ιο.	Are any of your family members registered nurses? What are their relationships to you?
10.	lationships to you?
	lationships to you?
	lationships to you?
	Are any of your family members in other health fields? Please list them below Type of health field
	lationships to you?
	Are any of your family members in other health fields? Please list them below Type of health field
	Are any of your family members in other health fields? Please list them below Type of health field
	lationships to you?
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11.	lationships to you?

f friends, acquaintanhoice, what were some ave you generally fourue in your experience hat factors led you contains the sound that age did you fi	ces, or relatives were not supportive to your confidence of the reasons or factors they gave? Indiany of the reasons for negative responses to e? Nhich ones? hoose nursing as a career? rst even consider becoming a nurse? finitely decide to become a nurse?
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rue in your experienc	e? Which ones? hoose nursing as a career? rst even consider becoming a nurse?
hat factors led you c	hoose nursing as a career?rst even consider becoming a nurse?
t what age did you fi	rst even consider becoming a nurse?
	rst even consider becoming a nurse?
t what age did you de	finitely decide to become a nurse?
our nursing education	sing specialty as a career goal before you began ? Which one? Did you
the future?	after graduation If not, do you plan . If not, did you pursue another specialty?
nich one? nat type of work or p	osition do you now hold?
•	further formal education since graduating from (
	onal education in the future? Explain
nat are your long-ran	ge career goals?
	. How long? If not, have you ever
	f ever married, give spouse's highest educations f college give major

Do you have children?
Number sons, ages,
Would you be supportive of your childrens' choice of nursing as a career? Daughters? Sons?
Would you be supportive of your spouse's choice of nursing as a career?
What are some of the reasons that you would feel supportive or non-supportive
to family members choosing nursing?
Had you ever worked in the health field or had other health related training
prior to entering nursing? Explain.
Had you served in the military services? Branch Type of work or military field?
Highest rank Years of service
Year you graduated from OU College of Nursing
Prior to nursing, had you ever had another occupation?
What was it?
Had you previously been working toward other majors, or held other degrees?
At what age did you first learn that nursing was a career possibility for men?
Did school or college counselors provide you with helpful or realistic information about nursing?
Have there been one or more persons who have served as role models for you in nursing? If so, in what way?
None musing for all an arrangement and arrangement arr
Were nursing faculty generally supportive or non-supportive? In what ways?
Do women encounter specific problems in the nursing profession because they are female? Explain.
Do men encounter specific problems in the nursing profession because they are male? Explain.

Do you find that nursing staffs treat men nurses differently than they treat women nurses? How?
Do you find that physicians treat men nurses differently than they treat women nurses? How?
If you were to choose a career again, would you become a nurse?
If you would not choose nursing, what would you choose and why?
Do you believe that you have influenced any other person to choose or consider nursing as a career? If so who?
In what ways can colleges of nursing, faculty, and other nurses help to recruit and retain men in the nursing profession?

BEM INVENTORY

Developed by Sandra L. Bem, Ph.D.

Age	Sex
	Yr. in School
	· · · · · · · · · · · · · · · · · · ·

DIRECTIONS

On the opposite side of this sheet, you will find listed a number of personality characteristics. We would like you to use those characteristics to describe yourself, that is, we would like you to indicate, on a scale from 1 to 7, how true of you each of these characteristics is. Please do not leave any characteristic unmarked.

Example: sly

Write a 1 if it is never or almost never true that you are sly.

Write a 2 if it is usually not true that you are sly.

Write a 3 if it is sometimes but infrequently true that you are sly.

Write a 4 if it is occasionally true that you are sly.

Write a 5 if it is often true that you are sly.

Write a 6 if it is usually true that you are sly.

Write a 7 if it is always or almost always true that you are sly.

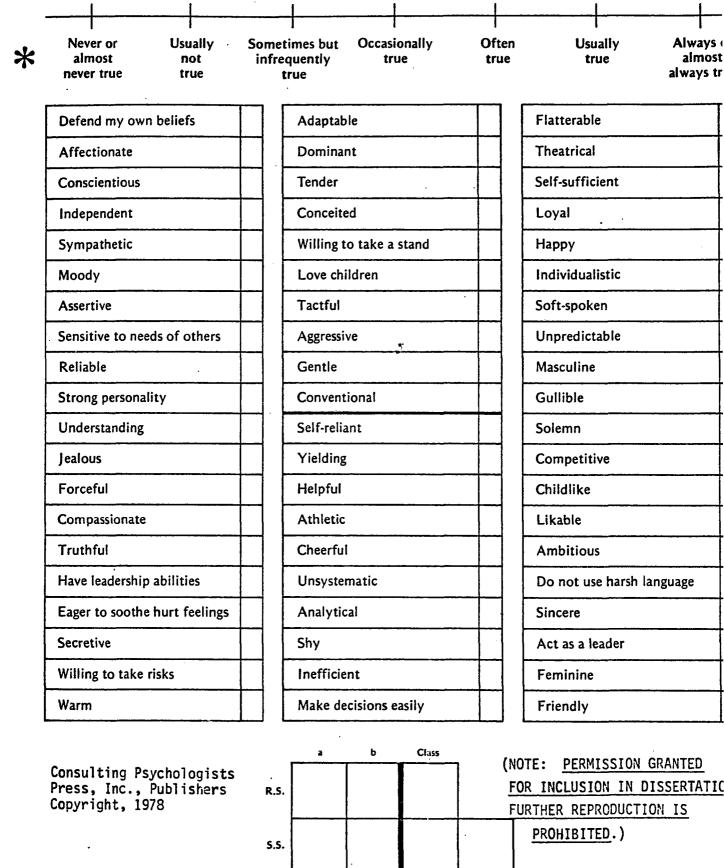
Thus, if you feel it is sometimes but infrequently true that you are "sly," never or almost never true that you are "malicious," always or almost always true that you are "irresponsible," and often true that you are "carefree,' then you would rate these characteristics as follows:

Sly	3	Irresponsible	7
Malicious	1	Carefree	5

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a-b

SS diff.

159 INSTRUCTIONS

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered <u>a</u> or <u>b</u>. Please select the one statement of each pair (and only one) which you more strongly <u>believe</u> to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Your answer, either \underline{a} or \underline{b} to each question on this inventory, is to be reported

beside the question by making a check mark.

Please answer these items carefully, but do not spend too much time on any one item. Be sure to find an answer for every choice. For each numbered question make an X on the line beside either the $\underline{\underline{a}}$ or $\underline{\underline{b}}$, whichever you choose as the statement most true.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more stongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

Remember
Select that alternative which you personally believe to be more true.

I	more s	trongly believe that:
1.	a.	Children get into trouble because their parents punish them too much.
	b.	The trouble with most children nowadays is that their parents are too easy with them.
2.	a.	Many of the unhappy things in people's lives are partly due to bad luck.
	b.	People's misfortunes result from the mistakes they make.
3.	a.	One of the major reasons why we have wars is because people don't take enough interest in politics.
	b.	There will always be wars, no matter how hard people try to prevent them.
4.	a.	In the long run people get the respect they deserve in this world.
	b.	Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5.	a.	The idea that teachers are unfair to students is nonsense.
	b.	Most students don't realize the extent to which their grades are influence by accidental happenings.
6.	a.	Without the right breaks one cannot be an effective leader.
	b.	Capable people who fail to become leaders have not taken advantage of their opportunities.
7.	a.	No matter how hard you try some people just don't like you.
	b.	People who can't get others to like them don't understand how to get along with others.

8.	a.	Heredity plays the major role in determining one's personality.
	b.	It is one's experiences in life which determine what they're like.
9.	a.	I have often found that what is going to happen will happen.
	b.	Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10.	a.	In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
	b.	Many times exam questions tend to be so unrelated to course work that studying is really useless.
11.	a.	Becoming a success is a matter of hard work, luck has little or nothing to do with it.
	b.	Getting a good job depends mainly on being in the right place at the right time.
12.	a.	The average citizen can have an influence in government decisions.
	b.	This world is run by the few people in power, and there is not much the little guy can do about it.
13.	a.	When I make plans, I am almost certain that I can make them work.
	b.	It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14.	a.	There are certain people wh are just no good.
	b.	There is some good in everybody.
15.	a.	In my case getting what I want has little or nothing to do with luck.
	b.	Many times we might just as well decide what to do by flipping a coin.
16.	a.	Who gets to be the boss often depends on who was lucky enough to be in the right place first.
	b.	Getting people to do the right thing depends upon ability; luck has has little or nothing to do with it.
17.	a.	As far as world affairs are concerned, most of us are the victims of forces we neither understand, nor control.
		By taking an active part in political and social affairs the people can control world events.
18.	a.	Most people can't realize the extent to which their lives are controlled by accidental happening.
	b.	There really is no such thing as "luck."

19.	a.	One should always be willing to admit his mistakes.
	b.	It is usually best to cover up one's mistakes.
20.	a.	It is hard to know whether or not a person really likes you.
	b.	How many friends you have depends upon how nice a person you are.
21.	a.	In the long run the bad things that happen to us are balanced by the good ones.
	b.	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22.	a.	With enough effort we can wipe out political corruption.
	b.	It is difficult for people to have much control over the things politicians do in office.
23.	a.	Sometimes I can't understand how teachers arrive at the grades they give.
	b.	There is a direct connection between how hard I study and the grades I get.
24.	a.	A good leader expects people to decide for themselves what they should do.
	b.	A good leader makes it clear to everybody what their jobs are.
25.	a.	Many times I feel that I have little influence over the things that happen to me.
	b.	It is impossible for me to believe that chance or luck plays an important role in my life.
26.	a.	Peole are lonely because they don't try to be friendly.
	b.	There's not much use in trying too hard to please people, if they like you, they like you.
27.	a.	There is too much emphasis on athletics in high school.
	b.	Team sports are an excellent way to build character.
28.	a.	What happens to me is my own doing.
	b.	Sometimes I feel that I don't have enough control over the direction my life is taking.
29.	a.	Most of the time I can't understand why politicians behave the way they do.
	b.	In the long run the people are responsible for bad government on a national as well as on a local level.

IDEAL NURSE SURVEY

Directions

On the opposite side of this sheet you will find a list of personality characteristics.

From these characteristics, we would like you to rate, on a scale of 1 to 7, how well they meet your idea of an ideal nurse.

Please do not leave any characteristic unmarked.

Following each characteristic you will find numbers from 1 to 7, please circle the number that best suits your opinion.

Example: brave

Circle a 1 if you think a nurse should never or almost never be brave. Circle a 2 if you think a nurse should usually not be brave. Circle a 3 if you think a nurse should sometimes, but infrequently be brave. Circle a 4 if you think a nurse should occasionally be brave. Circle a 5 if you think a nurse should often be brave. Circle a 6 if you think a nurse should usually be brave. Circle a 7 if you think a nurse should always or almost always be brave.

So, in the example that follows, if you think a nurse should <u>usually</u> be "brave," but <u>never or almost never</u> be "rude," you would rate these characteristics as follows:

Brave 1 2 3 4 5 6 7 Rude (1) 2 3 4 5 6 7

PLEASE TURN THE SHEET OVER AND PROCEED

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IDEAL NURSE SURVEY

From the characteristics listed below, select those that you consider most important for a person in <u>nursing</u>. In other words, which of the following personality characteristics do you think a nurse really ought to have?

Please score a rating for <u>each</u> of the characteristics on a scale of 1 to 7. Circle the number you wish to assign to each characteristic using the following scale.

1= never or almost never true, 2= usually not true, 3= sometimes but infrequently true, 4= occasionally true, 5= often true, 6=usually true, 7= always or almost always true

In my opinion this is the way	nurses should be:	· · · · · · · · · · · · · · · · · · ·	·
Defend their own beliefs	1234567	Self-reliant	1 2 3 4 5 6 7
Affectionate	1 2 3 4 5 6 7	Yielding	1 2 3 4 5 6 7
Conscientious	1 2 3 4 5 6 7	Helpful	1 2 3 4 . 5 6 7
Independent	1 2 3 4 5 6 7	Athletic	1 2 3 4 5 6 7
Sympathetic	1 2 3 4 5 6 7	Cheerful	1 2 3 4 5 6 7
Moody	1 2 3 4 5 6 7	Unsystematic	1 2 3 4 5 6 7
Assertive	1 2 3 4 5 6 7	Analytical	1 2 3 4 5 6 7
Sensitive to needs of others	1 2 3 4 5 6 7	Shy	1 2 3 4 5 6 7
Reliable	1 2 3 4 5 6 7	Inefficient	1 2 3 4 5 6 7
Strong personality	1 2 3 4 5 6 7	Make decisions easily	1 2 3 4 5 6 7
Understanding	1 2 3 4 5 6 7	Flatterable	1 2 3 4 5 6 7
Jealous	1 2 3 4 5 6 7	Theatrical	1 2 3 4 5 6 7
Forceful	1 2 3 4 5 6 7	Self-sufficient	1 2 3 4 5 6 7
Compassionate	1 2 3 4 5 6 7	Loyal	1 2 3 4 5 6 7
Truthful	1 2 3 4 5 6 7	Нарру	1234567
Have leadership abilities	1 2 3 4 5 6 7	Individualistic	1 2 3 4 5 6 7
Eager to soothe hurt feelings	1 2 3 4 5 6 7	Soft-spoken	1 2 3 4 5 6 7
Secretive	1 2 3 4 5 6 7	Unpredictable	1 2 3 4 5 6 7
Willing to take risks	1 2 3 4 5 6 7	Masculine	1 2 3 4 5 6 7
Warm	1 2 3 4 5 6 7	Gullible	1 2 3 4 5 6 7
Adaptable	1234567	Solemn	1 2 3 4 5 6 7
Dominant	1234567	Competitive	1 2 3 4 5 6 7
Tender	1234567	Childlike	1234567
Conceited	1 2 3 4 5 6 7	Likab1e	1 2 3 4 5 6 7
Willing to take a stand	1234567	Ambitious	1 2 3 4 5 6 7
Love Children	1234567	Do not use harsh language	1 2 3 4 5 6 7
Tactful	1234567	Sincere	1 2 3 4 5 6 7
Aggressive	1234567	Act as a leader	1 2 3 4 5 6 7
Gentle	1234567	Feminine	1 2 3 4 5 6 7
Conventional	1234567	Friendly	1234567

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**University of Oklahoma at Oklahoma City • Health Sciences Center

College of Nursing

Dear

I am hoping by now that you have received the packet of research questionnaires I sent you. However, with all the holiday mail and general confusion at the post office, I am not sure everyone's packet arrived.

In case your questionnaires did not reach you, or have become mislaid, please return the enclosed post card and I will gladly mail you another packet. If at all possible, I would like to have all the packets back by the end of this month.

Because my study sample is small, I am most anxious to have every participant's input. I will deeply appreciate your time, interest, and comments given to the survey.

Thanks again for your help during this busy holiday season. Hope you have a very Merry Christmas!

Sincerely,

Barbara J. Holtzclaw, R.N., M.S. Associate Professor, Graduate Program College of Nursing APPENDIX D

RAW DATA COMPUTED SCORES SUMMARIZED DATA COMPUTED SCORES BIOGRAPHICAL SUMMARY

RAW DATA -- COMPUTED SCORES

ID	AGE	BSRI-F	BSRI-M	BSRISSD	MFDT	SXTYP	BSRI-NF	BSRI-NM	NSXTYP	I-ESCORE	GEN
01	26	5.05	4.65	+08	55	1	4.70	5.10	2	09	2
02	24	4.00	5.45	-21	36	2	4.85	6.05	2	06	1
03	29	5.15	5.70	-05	47	3	5.80	5.30	3	06	1
04	23	4.70	5.05	-03	48	2	4.95	5.30	3	07	2
05	23	5.45	4.10	+23	65	1	4.95	5.85	3	09	2
06	30	4.50	6.00	-20	37	2	4.55	6.05	2	06	2
07	30	4.05	4.35	-04	47	4	4.65	4.70	4	80	1
80	33	3.95	4.30	-05	47	4	4.15	4.50	4	14	1
09	32	5.05	5.25	00	50	3	5.45	4.50	1	06	1
10	31	4.40	5.45	-14	41	2	4.55	5.45	2	11	,1
11	28	5.80	4.60	+22	65	1	5.25	5.75	3	08	2
12	24	5.40	5.85	-03	48	3	5.50	5.15	3	08	`1
13	28	4.85	5.35	-05	47	2	5.65	5.70	3	03	2
14	30	5.25	5.25	+03	52	3	5.20	5.10	3	11	1
15	28	4.15	4.45	-04	47	4	4.35	4.75	4	09	1
16	27	4.35	5.10	-10	43	2	3.15	4.95	2	11	2
17	33	4.25	4.75	-07	45	4	4.35	5.40	2	05	1
18	24	4.60	4.25	+06	54	4	4.55	5.15	2	14	2
19	30	4.55	5.50	-13	41	2	4.65	5.20	2	06	1
20	29	4.75	4.50	+06	54	4	4.65	5.15	2	17	2
21	26	4.80	4.75	+03	52	4	4.65	5.30	2	10	1
22	33	4.30	6.75	-35	27	2	5.15	6.75	3	01	1

RAW DATA -- COMPUTED SCORES

(Continued)

					MFDT	SXTYP	BSRI-NF	BSRI-NM	NSXTYP	I-ESCORE	GEN
23	46	3.95	5.30	-20	37	2	4.70	5.90	2	03	1
24	27	4.45	4.90	-05	47	4	4.60	4.95	2	06	1
25	28	5.60	4.20	+24	66	1	4.50	5.00	2	10	2
26	27	5.00	5.45	-04	47	3	4.60	5.20	2	19	1
27	27	4.10	5.35	-18	38	2	3.70	4.65	4	12	1
28	43	5.75	4.60	+21	64	1	5.50	5.35	3	17	2
29	30	5.35	5.75	-03	48	3	5.25	5.45	3	06	1
30	33	4.70	4.30	+08	55	4	3.80	5.20	2	10	2
31	29	5.30	4.75	+11	57	1	5.70	6.25	3	05	2
32	27	5.50	4.45	+19	63	1	4.40	4.80	4	06	2
33	48	5.05	5.80	-09	44	3 ·	5.30	6.05	3	13	2
34	29	4.70	4.95	-02	49	2	4.80	5.20	2	05	2
35	30	5.15	6.15	-12	42	3	4.30	5.40	2	07	2
36	28	5.80	5.40	+06	54	3	5.15	5.40	3	10	1
37	28	5.25	4.65	+11	57	1	4.40	4.40	4	15	2
38	29	5.45	5.55	+02	51	3	4.70	4.95	2	10	2
39	31	5.25	5.55	-02	49	3	5.00	5.25	3	06	1
40	30	5.20	5.75	-06	46	3	5.65	6.60	3	08	2
41	29	4.80	5.55	-09	44	2	4.90	5.60	3	80	1
42	32	3.90	5.65	-27	32	2	4.20	5.45	2	06	1
43	25	5.30	4.80	+10	57	1	5.05	5.05	3	12	2
44	29	4.40	5.55	-16	39	2	4.80	5.25	2	11	2
45	32	4.40	5.35	-13	41	2	4.55	4.80	4	08	1

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RAW DATA -- COMPUTED SCORES

(Continued)

ID .	AGE	BSRI-F	BSRI-M	BSRISSD	MFDT	SXTYP	BSRI-NF	BSRI-NM	NSXTYP	I-ESCORE	GEN
46	28	4.95	5.05	+01	51	3	4.50	4.70	4	09	2
47	27	5.15	4.80	+08	55	1	4.70	5.30	2	04	2
48	33	4.25	4.70	-06	46	4	4.65	5.25	2	10	1
49	28	4.80	4.20	+11	57	4	4.60	5.50	2	13	1
50	27	5.40	5.80	-03	48	3	5.00	5.65	3	12	1
51	23	5.40	5.15	+04	53	3	5.05	5.45	3	11	2
52	. 24	4.85	5.80	-12	42	2	4.60	5.40	2	11	2

Code for Scores

BSRI-F = Bem Sex-Role Inventory, Femininity

BSRI-M = Bem Sex-Role Inventory, Masculinity

BSRISSD = BSRI-F minus BSRI-M, Standard Score Difference*

MFDT = T-score for femininity-minus-masculinity difference*

SXTYP = Sex-type: 1=feminine, 2=masculine, 3=androgynous, 4=undifferentiated.

BSRI-NF = Sex-typed nursing role perceptions, Femininity.

BSRI-NM = Sex-typed nursing role perceptions, Masculinity

NSXTYP = Sex-type for "ideal nurse": 1=feminine, 2=masculine, 3=androgynous, 4=undifferentiated

I-ESCORE = Rotter I-E locus of control score

GEN = gender

*Based on Bem's 1978 Stanford Sample

SUMMARIZED DATA FROM COMPUTED SCORES BEM SEX-ROLE INVENTORY

Dimension Measured	Men Nurses (N = 26)	Women Nurses (N = 26)					
Femininity:							
Mean	4.64	5.07					
s.d.	0.56	0.41					
Masculinity:							
Mean	5.26	4.99					
s.d.	0.58	0.59					
Femininity-minus-Masculinity:							
Mean	-7.62	3.42					
s.d.	10.28	12.51					

DISTRIBUTION OF SUBJECTS IN EACH SEX-ROLE CATEGORY

· · · · · · · · · · · · · · · · · · ·	Feminine	Masculine	Androgynous	Undifferentiated
Men	(0)	(9)	(9)	(8)
Nurses $(N = 26)$	0%	34.62%	34.62%	30.77%
Women	(10)	(7)	(6)	(3)
Nurses (N = 26)	38.46%	26.92%	23.08%	11.54%

SUMMARIZED DATA FROM COMPUTED SCORES I-E LOCUS OF CONTROL SCALE

	Mean	Standard Deviation
Men Nurses (N = 26)	8.46	3.77
Women Nurses (N = 26)	9.54	3.72

MEANS FOR I-E SCORES BY SEX-TYPE

	Men Nurses	Women Nurses
Feminine	(no cases)	9.50
Masculine	6.78	7.71
Androgynous	9.33	9.67
Undifferentiated	9.38	13.67

SUMMARIZED DATA FROM COMPUTED SCORES IDEAL NURSE SURVEY (BSRI-N)

Dimension Measured	Men Nurses (N = 26)	Women Nurses (N = 26)
Femininity:		
Mean	4.78	4.78
s.d.	0.46	0.57
Masculinity:		
Mean	5.27	5.36
s.d.	0.50	0.50

DISTRIBUTION OF SUBJECTS' SEX-TYPED NURSE ROLE PERCEPTIONS

	Feminine	Masculine	Androgynous	Undifferentiated
Men	(1)	(11)	(9)	(5)
Nurses $(N = 26)$	3.85%	42.31%	34.62%	19.23%
Women	(0)	(13)	(10)	(3)
Nurses $(N = 26)$	0%	50.00%	38.46%	11.54%

Biographical Summary of Men and Women Nurses in Study Sample

Varia	able	Men (N = 26)	Women (N = 26)
Average	Age in Years	30	28.8
Years s	ince Graduation	3.5	3.8
Married	•	73%	77%
Single		19%	15%
Divorce	d .	8%	8%
Father:	Executive or Professional	38%	33%
	Sales work	8%	8%
	Skilled labor	42%	46%
	Unskilled labor		4%
	Public school teacher	4%	
	Farmer	8%	4%
Mother:	Executive or Professional	8%	8%
	Sales work		4%
	Skilled labor	30%	42%
	Unskilled labor	12%	
	Public school teacher	8%	4%
	Unemployed	42%	42%
Father:	Less than high school grad	16%	4%
•	High school graduate	46%	50%
	College but not graduate		11%
	College graduate	19%	8%
	Advanced degree	19%	23%
	Vocational training		4%
Mother:	Less than high school grad	11%	11%
	High school graduate	50%	42%
	College but not graduate	23%	31%
	College graduate	8%	. 4%
	Advanced degree	4%	8%
	Vocational training	4%	4%

(Percentages rounded to nearest whole number)

Biographical Summary of Men and Women Nurses in Study Sample (Continued)

Varia	ble	Men (N = 26)	Women $(N = 26)$
Birth	Order: Oldest	35%	46%
	Middle	35%	31%
	Youngest	23%	19%
	Only Child	7%	4%
Siblings:	Not college graduates	54%	36%
	College graduates	13%	48%
	Advanced degrees	33%	16%
Spouse:	Executive or Professional*	5%	25%
	Sales work	16%	5%
	Skilled labor	21%	35%
	Public school teacher	11%	5%
	Registered Nurse	36%	10%
	Physician		15%
	Other health professional	11%	5%
*Non-heal	th related professional		
Spouse:	High school graduate	16%	15%
	College but not graduate	26%	35%
	College graduate	37%	20%
	Advanced degree	16%	30%
	Vocational training	5%	***
Education	since Nursing School: None	53%	80%
	Masters degree: Not nursing	8%	~-
	Masters in Nursing	12%	8%
			•
	Some Graduate hours credit	12%	8%

Biographical Summary of Men and Women Nurses in Study Sample (Continued)

Variable	Men (N = 26)	Women (N = 26)	
Present position: Staff nurse	46%	65%	
Full time student	8%	4%	
Part-time Nursing	4		
Unemployed	·	12%	
Head nurse, Supervisor	23	15%	
Anesthetist	19		
Specialist or Practitioner	· · · · · · · · · · · · · · · · · · ·	4%	
Family member nurse: Mother	12%	12%	
Sister	4%	8%	
Male Relative	4%		
Other Females	11%	11%	
None	69%	69%	
Family Health worker: Mother			
Father	8%	15%	
Siblings	:8%		
Other relatives	11%	31%	
None	73%	54%	
Average age first considered nursing	21.5	16.12	
Average age decided to become nurse	22.6	20.42	
Average age aware men were nurses	19.5	19.5	

Biographical Summary of Men and Women Nurses in Study Sample (Continued)

Variable		Men (N = 26)	Women (N = 26)
Family Influ	ence on Career:		
Stro	ng and supportive	23%	61%
Weak	but supportive	42%	27%
Neut	ral .	23%	12%
Nega	tive but supportive	4%	
Nega	tive and not supportive	8%	.
Friends Infl	uence on Career:		
Stro	ng and supportive	50%	35%
Weak	but supportive	19%	42%
Neut	ral	27%	19%
Nega	tive but supportive	4%	4%
Nega	tive and not supportive		gar emp
Had Nursing	Role Model: Poor ones	12%	
Had	one or more good ones	42%	81%
Had	models in medical corps	22%	
None	available	24%	19%
	n of Nursing Specialty sing School:		
None		32%	65%
Anes	thestist	40%	⇔ ≈
Admi	nistration - Ns. Director		
Spec	ialist or Practitioner	4%	15%
_	ial type of patient	24%	19%

Biographical Summary of Men and Women Nurses in Study Sample (Continued)

Va	riable	Men (N = 26)	Women (N = 26)
Involve	ed in Nursing Specialty Now:		
	None	50%	69%
	Anesthetist	27%	
	Administration - Ns. Directo	r 4%	
	Specialist or Practitioner	4%	8%
	Special type of patient	15%	19%
	Nurse Educator		4%
Plan to	pursue a specialty in future	:	
	Already in desired specialty	38%	19%
	Anesthetist	8%	
	Administration (M.S.N.)	11%	
	Specialist or Practitioner	8%	46%
	Special type of patient	4%	8%
	Nursing Education	8%	4%
	Hospital Administration	8%	
	None	15%	23%
Identif	ied Men Nurse's Problems:		
	No Problems Seen	23%	8%
	Few Problems Seen	46%	50%
	Many Problems Seen	31%	42%
Identif	ied Women Nurse's Problems:		
	No Problems Seen	27%	23%
	Lack status and prof. respec	t 54%	54%
	Sexual harassment	8%	4%
•	Lack status, respect & are sexually harassed	11%	15%
	Have pressures of work & fam	ily	4%

Biographical Summary of Men and Women Nurses in Study Sample (Continued)

Variable	Men (N = 26)	Women (N = 26)	
View of Differential Treatment of Men Nurses by Patients:			
Patients object or dislike	8%	12%	
Patients not sure what to expect	42%	46%	
Patients prefer or are deferent	27%	27%	
No differences seen	23%	15%	
View of Differential Treatment of Men Nurses by Nursing Staff:			
Staff often dislike or object	4%	8%	
Staff not sure what to expect	15%	4%	
Staff prefer or are deferent	31%	27%	
Misused by staff, physical labor	19%	23%	
No differences seen	31%	38%	
View of Differential Treatment of Men Nurses by Physicians:			
Doctors dislike or are negative		4%	
Doctors prefer them to women nurs	e 12%	4%	
Doctors treat them as colleagues	61%	65%	
Doctors not sure what to expect	4. 4%		
No differences seen	23%	27%	
Recommendations for Recruiting &			
Retaining Men in Nursing: None given	15%	23%	
More role models who are men	27%	23%	
Better salaries for nurses	12%	4%	
Increase status of nursing	4%	15%	
Unite the profession more	4%		
Increase role models & salary	***	4%	
Increase role models & status	4%	4%	
Increase salary & status	19%	8%	
Increase role models, salary & status	15%	19%	

Biographical Summary for Men and Women Nurses in Study Sample (Continued)

Variable	Men (N = 26)	Women (N = 26)
Would be supportive of spouse's choice of nursing as career:		
Yes	61%	60%
Yes, with reservation	8%	4%
No	31%	36%
Would be supportive of son's choice of nursing as career:		
Yes	69%	71%
Yes, with reservation	12%	8%
No	19%	21%
Would be supportive of daughter's		
choice of nursing as career:		
choice of nursing as career: Yes	69%	83%
	69% 12%	83% 9 %
Yes		•
Yes Yes, with reservation	12%	9%
Yes Yes, with reservation No Would choose nursing again as a	12%	9%
Yes Yes, with reservation No Would choose nursing again as a career for self:	12% 19%	9% 8%
Yes, with reservation No Would choose nursing again as a career for self: Yes	12% 19% 46%	9% 8% 35%