ANDROGYNY AND THE IDEAL NURSE

A THESIS

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CHAPTER 1

INTRODUCTION

In any analysis or discussion of the roles of nurses, it must be realized that they are a reflection of the roles of women. Ninety-eight percent of the registered nurses in the United States are women (Yeaworth, 1976). Largely due to the efforts of the Women's Liberation Movement, the roles of women have greatly expanded in the last two decades. As a woman's profession, nursing has profited from the role expansion and yet, Virginia Cleland's (1971) remarks a decade ago that nursing's most fundamental problem is that it is a woman's occupation in a male-dominated culture remains a relevant issue for nursing today. Much has been written in the literature of nursing's bond to the Women's Liberation Movement (Christy, 1972; Heide, 1973; Lamb, 1973; Moore, Decker, & Dowd, 1978; Roberts & Group, 1973; Starr, 1974) and of subsequent "sex discrimination" in nursing which the so-called "new radicalism" has spawned (Bullough & Bullough, 1975; Cleland, 1971; Hite, 1977; Levinson, 1976). As Women's Liberation challenges traditional sex roles and calls for new sex role definitions,

the corresponding conflict in the nursing profession (male-doctor/female-nurse) sharpens.

The traditional role of women has prescribed that they be emotionally labile, dependent, fragile, intuitive, non-aggressive, passive, receptive, subjective, and supportive (from Till, 1978). Taking its cue from woman's role, the traditional image of nurses has been individuals who are caring, intuitive, nurturant, passive, and self-sacrificing (from Till, 1978). This image of nursing persists, touted in television and popular novels (Austin, 1977; Butler, 1978; Grissum, 1976; Helson, 1972; Keller, 1979; Wilson, 1971; Yeaworth, 1976). As new nursing roles have emerged, such as nurse practitioner, clinical specialist and researcher, the nurse has necessarily had to encompass into her repertoire such traditional male-valued traits as assertiveness, collaboration, confidence, independence, innovativeness, self-discipline, and self-direction. In looking to the future, nursing leaders note the need for nurses to be able to operate with the full potential of human traits by freeing them from the burden of sex stereotyping (Dean, 1978; Holt, 1976; Hutchens, 1980; Kjervik, 1979; Vance, 1979). It has been argued that freeing people from rigid sex roles and allowing them to be androgynous (from "andro", male and "gyn", female) should permit them to be more flexible

in meeting new situations and less restricted in what they can do and how they can express themselves (Bem, 1974).

This study focused on the concept of androgyny (the integration of both feminine and masculine personality characteristics in the same individual) in nursing. Though there is recognition of the androgynous nurse among the nursing leadership (Dean, 1978; Sargent, 1976), the question remains how widespread androgyny is in the nursing rank and file. Do the women who are attracted to nursing (students), who teach nursing (faculty), and who practice clinical nursing view themselves as androgynous? Further, do they regard androgyny as important for nursing?

Statement of the Problem

The problem of this study was: To what extent do student nurses, nursing faculty, and clinical nurses view androgyny in themselves and in their idealization of the professional nurse?

Statement of the Purposes

The purposes of this study were to:

1. Identify the characterization of the "ideal female professional nurse" based on the sex-role categories labeled Androgynous, Masculine, Feminine, or Undifferentiated (Bem, 1974) in the following groups:

a. senior nursing students

b. nursing faculty

c. clinical nurses

2. Determine the relationship among senior nursing students, nursing faculty, and clinical nurses in their characterizations of the "ideal female professional nurse".

3. Determine the relationship between reported self-image as characterized by sex-role category (Bem, 1974) and characterization of the "ideal female professional nurse" within and between the groups.

Justification of the Problem

Current Women's Liberation literature depicts nursing as subservient to medicine and urges women with brains to become doctors rather than to settle for being nurses (Christy, 1972). As young women follow this advice, nursing recruitment becomes more difficult and the nursing shortage deepens.

At the turn of the 19th century, the image of nursing was still imbued with religious heritage. In fact, early schools of nursing were conducted like monastic orders (Cowden, 1978). In those early years, nursing crystallized around certain virtuous feminine themes of the late 19th century. The tasks of nurse and doctor fitted together in a "characteristic subordinate-superordinate pattern, since,

after all, nurses were women" (Strauss, 1966, p. 91). In those days women selecting a "respectable profession" chose between nursing and teaching. Today, all major professions are open to women and the young prospective nurse is in the position of committing herself to a career with little knowledge of what she is choosing, along with the burdensome knowledge of believing that another occupation might hold more promise, meaning, and personal satisfaction. Furthermore, the professional nurse must often contend with the "reality shock" of entering a work world quite discrepant with the professional socialization inculcated during her education (Cowden, 1978). In a 1974 survey, Beletz (1974) found that the public seemed unaware of many of the more recent changes in nursing practice and that the traditional images of the nurse as female nurturer, medicator, physician's assistant, and maid have persisted.

As a woman's profession (Yeaworth, 1976) nursing cannot separate itself from the role and status of women (Bullough & Bullough, 1975; Christy, 1972; Cleland, 1971; Heide, 1973; Hite, 1977; Lamb, 1973; Levinson, 1976; Moore, Decker, & Dowd, 1978; Roberts & Group, 1973; Starr, 1974). More than any other field, nursing is characterized by all the traditionally labeled "feminine traits". One can easily substitute "nurse" for "woman" when looking at some of the

so-called feminine traits: being caring, tender, compassionate, presumed intuitive ability to relate to people, and nurturance. Other "feminine" traits which are culturally expected of women and hence are assumed should be displayed by nurses are: being submissive, passive, subjective, and "emotional". Contrasting these with some of the traditionally labeled "masculine" traits: decisive, initiating, objective, persistent, aggressive, rational, brave, and dominant (Heide, 1973) you will find many of the traits needed by nurses to perform the modern emerging nursing roles of nurse practitioner, clinical specialist, and nurse researcher--roles integral to comprehensive patient care. Florence Nightingale, who typified nursing's nurturing, womanly role, called upon these more culturally defined masculine traits of her personality in her venture in the Crimea which allowed her to be unique and stand out in the history of nursing (Wilson, 1971).

Dangers to the nursing profession can be understood when differences in traits commonly attributed to "maleness" and "femaleness" in western culture are viewed (Moore, Decker, & Dowd, 1978). As an alternative to the culturally traditional masculine-feminine dichotomy, researchers are investigating the concept of androgyny (Bem, 1975, 1976; Bem & Watson, 1976; Heilbrum, 1976; Jones, Chernovetz &

Hannson, 1978; Kelly & Worell, 1976; Spence, Helmreich, & Stapp, 1975; Wakefield, Sasek, Friedman, & Bowden, 1976; Wiggins & Holzmuller, 1978), a term meaning the integration of feminine and masculine personality traits in a single individual of either sex (Bem, 1974). Bem (1975) suggested that an androgynous sex-role provides a new standard of mental health for both sexes. Because, according to Bem, the androgynous person incorporates both traditionally masculine and feminine characteristics into her or his self-concept, they need not avoid certain kinds of adaptive behaviors as inconsistent with the self-concept just because these behaviors are often associated with the other sex. This frees the individual to actualize all her/his potentialities and to engage in situationally effective behavior regardless of its stereotype as masculine or feminine (Orlofsky, 1980).

The ideology that shapes women's lives is changing (Lippman-Blumen, 1973). Like the changing image of women, so too must nursing's image change (Dachelet, 1978). Androgyny may be a viable concept for nursing's changing image. In investigating the sex-role identities of current and future nurses as well as their characterizations of the sex-role identity of the idealized nurse, some measure of current functioning and desirability of androgyny in

nursing may be observed. Not only may this have implications for the recruitment of nurses and maintenance of the present nurse population, but it is of importance to the evolution of nursing as a profession (Dean, 1978; Sargent, 1975) and possibly to the excellence of patient care.

Theoretical Framework

Leon Festinger's (1957) theory of cognitive dissonance which applies to psychological or logical inconsistency, is based on the assumption that a person tries "to establish internal harmony, consistency, or congruity among his opinions, attitudes, knowledge and values ..." (Cardwell, 1973, p. 31). This same kind of consistency also exists between what a person knows or believes and what she/he does. However, a person may experience inconsistencies in these areas when the usually successful rationalization fails. In the presence of such inconsistencies there is psychological discomfort (Festinger, 1957).

Festinger replaced the word "inconsistency" with the term dissonance and the word "consistency" with the term consonance. He proposed that dissonance is the "existence of nonfitting relations among cognitions" and is a motivating factor in its own right. He defined cognition as "any knowledge, opinion, or belief about the environment, about oneself, or about one's behavior". Cognitive

dissonance can be seen then as "an antecedent condition which leads to activity oriented toward dissonance reduction just as hunger leads to activity oriented toward hunger reduction" (Festinger, 1957, p. 3).

The terms dissonance and consonance specifically refer to relations which exist between pairs of "elements". The elements refer to cognition or "knowledges". In Festinger's use of the term, "knowledge" includes things to which the word does not ordinarily refer, for example, opinions, beliefs, values, and attitudes (Festinger, 1957). An important determinant of the elements of cognition is that they are responsive to reality: the reality may be physical or psychological or social, and so the elements of cognition correspond, by and large, with what the individual feels or does or with what is actually existing in the environment. With beliefs, opinions, and values, the reality may be what others think or do, or the reality may be discovered through experience or what an individual has been told. Festinger noted that the reality an individual experiences will "exert pressure in the direction of bringing the appropriate cognitive elements into correspondence with that reality" (Festinger, 1957, p. 11).

It follows that if the cognitive elements do not correspond with an individual's reality, pressures will exist.

Further, if two elements do not correspond, they are dissonant. Festinger stated that "two elements are in a dissonant relation if, considering these two alone, the obverse of one element would follow from the other", or, "x and y are dissonant if not-x follows from y" (Festinger, 1957, p. 13).

From where does dissonance arise? Festinger (1957) suggested sources which include:

1. From logical inconsistency.

2. From cultural mores.

3. From one specific opinion being included, by definition, in a more general opinion (e.g., a Democrat voting for a Republican when "being a Democrat" includes, as part of the concept, voting for Democratic candidates).

4. From past experience.

From each of these sources, dissonance could occur, if between two elements, one does not follow from the other.

Dissonant elements can exist and not be uncomfortable to an individual. It is the importance or value an individual places on the elements which creates the magnitude of the dissonance. Once an individual experiences dissonance, it activates and directs her/him to reduce the uncomfortable tension or to actively avoid information and situations that might increase the dissonance. According

to Festinger, "the strength of the pressure to reduce the dissonance is a function of the magnitude of the dissonance" (Festinger, 1957, p. 18). According to the theory, resolution of dissonance can be achieved by:

1. changing the dissonant element so it is consonant

2. reducing the dissonant element by redefinition to a status of unimportance

3. adding consonant elements to the cognitive structure to increase the ratio of consonant to dissonant elements (Zimbardo & Ebbeson, 1969).

However, resistance to changing a cognitive element exists. A primary source of resistance to change for any category of cognitive element is the responsiveness of such elements to reality. If one sees that the sky is blue, it is difficult to think it is not so (Festinger, 1957). Too, circumstances exist which create resistance in an individual to change her/his actions such as: a change may be painful or involve loss; the present behavior may be otherwise satisfying; making the change may not be possible; an element in dissonance with one element may also be in consonance with many other elements and so changing it to reduce dissonance with the one element would create dissonance with the many elements (Festinger, 1957).

According to the theory, reducing dissonance is a basic process in humans and so its manifestations will be observed in a wide variety of contexts (Festinger, 1957). In this study, congitive dissonance between a nurse's self concept (sex-role category of self) and her professional role concept (sex-role category of the ideal professional nurse) were observed, as measured by the Short Bem Sex Role Inventory. In accordance with the theory, it was expected that the longer an individual has been exposed to professional socialization, the greater will be the reduction in whatever dissonance may have been earlier perceived in the alignment of her needs and values with the demands of the profession. In other words, not only should nurses grow more consistent with each other in their views of the profession, but they also should grow more consistent within themselves as they are increasingly exposed to the world of their profession (Davis & Olesen, 1964, p. 8).

Assumptions

1. Sex-role identity is a part of self-concept (Bem, 1975; Erdwins, Small, & Gross, 1980).

2. Self concept is derived from the culture (Bem, 1975; Orlofsky, 1977).

3. A subject's sex role characterization of an idealized professional nurse is a combined reflection of

her socialization in the profession of nursing and of her idealization of her own self as a nurse.

4. The present day professional nurse requires both feminine and masculine characteristics (Dean, 1978; Sargent, 1976).

5. An individual will strive for consistency between self concept and professional role concept (Festinger, 1957).

Hypotheses

The following hypotheses were tested in this study:

1. There will be no difference in the percentage of individuals in the four sex-role categories for Bem's female Stanford sample and for the female sample tested.

2. There will be no difference in the percentage of individuals in the four sex-role categories for Bem's female Stanford sample and for subject's characterization of the "ideal female professional nurse".

3. There will be no difference in the percentage of characterizations of the "ideal female professional nurse" in the four sex-role identity categories among the following three groups:

   a. senior nursing students

   b. nursing faculty

   c. clinical nurses.

4. There will be no difference in sex-role categories between a subject's reported self image and her characterization of the "ideal female professional nurse".

Definition of Terms

Androgyny: The integration of both feminine and masculine personality characteristics within a single individual (Bem, 1974).

Androgynous: Designated sex-role category when a subject scores above the median in both femininity and masculinity based on the median femininity and masculinity scores of Bem's 1978 normative sample of Stanford University students (Bem, 1981).

Feminine, femininity: The cultural standard which describes behaviors and characteristics associated with the female gender (Till, 1978).

Feminine: Designated sex-role category when a subject scores above the median in femininity and below the median in masculinity based on the median femininity and masculinity scores of Bem's 1978 normative sample of Stanford University students (Bem, 1981).

Ideal female professional nurse: A subject's idealized characterization of a nurse stated in terms of a sex-role category based on Bem's (1981) Short BSRI.

Masculine, masculinity: The cultural standard which describes behaviors and characteristics associated with the male gender (Till, 1978).

Masculine: Designated sex-role category when a subject scores below the median in femininity and above the median in masculinity based on the median femininity and masculinity scores of Bem's 1978 normative sample of Stanford University students (Bem, 1981).

Clinical nurse: A female licensed registered nurse who is currently practicing part-time or full-time professional nursing and who has obtained as a minimum, a Bachelor of Science degree in nursing.

Nursing student: A female enrolled in a Bachelor of Science degree nursing program who is currently at the first semester senior educational level; a non-registered nurse.

Undifferentiated: Designated sex-role category when a subject scores below the median in both femininity and masculinity based on the median femininity and masculinity scores of Bem's 1978 normative sample of Stanford University students (Bem, 1981).

Limitations

1. The Bem Short BSRI was standardized with a sample of college students. The sample of this study included non-college student subjects.

2. The sample was selected from nursing students and faculty in a specific baccalaureate nursing program and from clinical nurses in a specific hospital; thus, the findings may be pertinent only to the populations of those two institutions.

3. The sample groups were restricted to female nursing students, faculty, and clinicians.

4. The sample consisted of volunteer subjects from the designated population groups without random selection.

5. Dimensions that underlie desirability ratings may differ from those that underlie self-ratings (Pedhazur & Tetenbaum, 1979). The BSRI was proposed by its author as a self-rating instrument (Bem, 1974).

6. No attempt was made to control the setting of data collection across the three groups in the sample.

Summary

In Chapter 1, introductory statements and justification of the problem identified nursing as a women's profession necessarily linked to women's identity in the larger culture. Changes in the roles of women and in the evolution of nursing require new behaviors to meet role needs. The research problem was justified with relevance to investigating these emerging needs and the implications they have for

nursing recruitment, maintenance of current nurse levels, and for the professional advancement of nursing.

Leon Festinger's (1957) theory of cognitive dissonance provided the theoretical framework for the study, offering a means of evaluating the results of how subjects identify androgyny in themselves and in the ideal nurse. Study assumptions were drawn from work done in the area of androgyny, from the literature on nursing and androgyny, and from the theoretical framework.

The first two hypotheses compare the sample results on the "self" and "ideal" sex-role categories to Bem's 1975 normative sample. The third hypothesis compares differences in how the three sample groups identify the sex-role category for the "ideal nurse". The fourth hypothesis is developed from Festinger's theory of cognitive dissonance and examines differences in which individual subjects report "self" and "ideal" sex-role categories.

Chapter 1 concludes with a definition of terms and study limitations. The terms defined focus on sex-role categories and sample group definitions. Limitations were derived from the research design and from the tool used.

CHAPTER 2

REVIEW OF THE LITERATURE

An investigation of the relationship between sex-role identity of the self and of characterizations of the "ideal female professional nurse" in nurses requires a literature review in several areas. This chapter will discuss the major topics of sex-role development, sex-role identity, androgyny, nursing and androgyny, and the ideal nurse as relates to sex-role identity. Studies in these various areas will be described and related sub-topics will be developed.

Learning Sex Roles

Underlying the idea that society has different sex-roles for males and females is the assumption that sex-role identification is acquired by children through learning in a social context. Currently, there are three major theories to explain the learning of sex-roles: reinforcement, modeling, and a cognitive-developmental approach (Williams, 1977).

The concept of reinforcement emphasizes the use of rewards and punishments for establishing behavior. As an explanation of sex-role acquisition, it proposes that as children try out various sex-typed behaviors, they are

rewarded for those that are appropriate and punished for those that are not. Many investigators (Sears et al., 1965; Williams, 1977) view reinforcement as too simplistic. "The rate at which these roles are learned, and the scope of their content, require additional processes" (Williams, 1977, p. 160).

Modeling, or learning by imitation, is dependent on observation and cognitive processes. It can occur without direct reinforcement (Bandura, 1969; Mischel, 1970). By watching how others behave, observing the consequences of their behavior, noticing environmental occurrences and the symbolic material of a culture (stories, pictures), a child learns male and female concepts. These include "cultural stereotypes of masculinity and femininity" (Williams, 1977, p. 161). Studies indicate that there is not systematic modeling to same-sex individuals (Maccoby & Jacklin, (1974), nor has uniform modeling of same-sex parents been ascertained (Heatherington, 1965; Troll et al., 1969). Though the importance of modeling in learning sex-typed behavior is controversial (Maccoby & Jacklin, 1974), an important point to note is that even if children imitate models of both sexes, they acquire both "masculine" and "feminine" behavioral components, regardless of what proportion of these components are manifest in behavior. "The selection of such behaviors for actual performance depends

on the necessary eliciting conditions and the belief that the action is appropriate" (Williams, 1977, p. 163).

In the cognitive-developmental theory of sex-role development, it is believed that a child develops rules or generalizations from what she/he observes, and then applies these over large and broad classes of behavior (Kohlberg, 1966). For example, a child may have observed that her father and brothers wear long trousers and induced the generalization that all people who wear long trousers are male. This observation becomes modified as broader classes of behavior are noted (Williams, 1977).

It is probable that all three of the processes of sex-role development discussed are involved in the emergence of sex-role behavior. They may have varying degrees of importance, considering the situation and age of the child involved (Williams, 1977).

Sex-Role Identity

Sex-role identity or orientation refers to the behaviors individuals exhibit and feel are appropriate for them as a result of their being male or female. These behaviors can be regarded as encompassing the wide spectrum of personality traits, interests, and social roles. The term sex-role is not synonymous with gender identity though it is related to it. Gender identity is the sense one has of him/herself as

being male or female. An individual can have a secure sense of gender identity and yet not manifest behaviors or personality characteristics that are predominantly sex-typed. Nor should the concept of sex-role be confused with sexual preference, which refers to the choice of sexual partners of the same or other sex (Orlofsky, 1980).

Sex-role identity is necessarily defined in terms of masculinity and femininity, which in turn can be regarded as sociocultural phenomena, reflecting cultural attitudes as to the proper or accepted roles of men and women. Traits and behaviors that are valued for males or females in a given culture comprise that culture's standards of masculinity and femininity (Orlofsky, 1980). Historically, the cultural norms of masculinity and femininity have been described in terms of dominant orientations toward these dichotomies. Parson and Bales (1955) associate masculinity with an "instrumental" orientation, described as a focus on getting the job done or the problem solved. Femininity was associated with an "expressive" orientation, which focuses on feelings and relationships with others, a group harmony and the welfare of others. Similarly, Bakan (1966) identified masculinity, as an "agenetic" orientation; a concern with oneself as an individual and seen in such behaviors as self-assertion, self-expansion, and self-protection. Bakan referred to femininity as a "communal" orientation; a

concern with the relationship between oneself and others. Finally, Broverman et al. (1972), identified that culturally valued masculine characteristics which include competitiveness, independence, logical thinking, objectivity, and business skill, constitute a "competency cluster". Valued feminine characteristics, including ability to express tender feelings, gentleness, and sensitivity to others' feelings were identified as a "warmth-expressiveness cluster".

The masculinity-femininity dichotomy has traditionally been conceptualized as opposite poles of a single continuum. There is empirical evidence that sex-role stereotypes persist. The research of Broverman et al. (1972) revealed that sex-role stereotypes exist despite sex-role-standard changes which occurred in the 1960's, though Maccoby and Jacklin's (1974) research on psychological differences between the sexes suggests that stereotyped beliefs about the sexes exaggerate the differences actually present.

Underlying the historical concept of masculinity and femininity as opposite ends of a single dimension has been the assumption that psychological differences between the sexes are a result of basic biological differences. For example, Freudian psychoanalysis holds that differences in male and female bodily structures and sexual functions

create differing psychological conflicts, anxieties, and personality characteristics in men and women (Orlofsky, 1980). This "anatomy is destiny" view has received much criticism, both by neo-Freudians such as Alfred Adler (1927), Karen Horney (1939), and Clara Thompson (1942), and by contemporary researchers including Jo Freeman (Cox, 1976), Maccoby and Jacklin (1974), and Naomi Weisstein (Cox, 1976).

Traditional Measurement of Sex-Role Identity

Reflecting the cultural stereotypes of sex-role identity, the notion of masculinity and femininity as opposites can be seen in the development of psychological tests of sex-role. Until the mid-1970's, the tests were bipolar and designed to pit masculine characteristics and interests against feminine qualities. On these tests, if an invidual scored high on one pole, she/he automatically scored low on the other (Orlofsky, 1980). Such major tests which used a questionnaire format include: Gough's Femininity Scale of the California Psychological Inventory; the Masculinity Scale of the Guilford-Zimmerman Temperament Survey; the Minnesota Multiphasic Personality Inventory Masculinity-Femininity Scale; and the Masculinity-Femininity Scale of the Strong Vocational Interest Blank (Constantinople, 1973).

Constantinople (1973) challenged the prevailing idea that masculinity and femininity are opposite poles of a single continuum. She noted that people manifest both masculine and feminine attributes and suggested that new scales be developed which would permit independent assessment of masculine-instrumental and feminine-expressive qualities. That is, she suggested submitting the question of masculinity and femininity as opposites or independent dimensions to empirical testing (Orlofsky, 1980). In retrospect, this challenge to masculinity and femininity being labeled and tested as an "either-or" category, was an important transition in the development of the concept of androgyny.

Androgyny

The word androgyny, derived from Greek: "andro" for male and "gyn" for female, is not a new concept. Ancient Chinese philosophy used the principles of "Yin" and "Yang" to describe the manifestation of both masculine and feminine characteristics in the same being (Creel, 1953). Carl Jung (1956) referred to "anima" and "animus" as the respective female and male characteristics in all humans. Freud (1940) stated that humans are inherently bisexual; each sex manifesting some of the reactions of the other sex.

More recent momentum in developing the concept of androgyny was gained when Rossi (1965) popularized the current use of the term androgyny in referring to sex-roles in which men and women each incorporate characteristics of both masculinity and femininity. In a similar view, Bakan (1966) called for integration of the masculine "agenetic" orientation and the feminine "communal" orientation, thus merging previously defined characteristics of each sex into socially sanctioned traits for both sexes. Finally, Constantinople (1973) opened the door to new ideas regarding the testing of sex-role identities when she challenged the existing precedent of testing sex-roles using bipolar scales.

Recently new scales have been developed as a result of sex-role-identity research, and are currently being used in measuring sex-role category levels (including androgyny) in individuals. The new measures assume an orthogonal two-dimensional model of masculinity and femininity such that a subject can score not only high or low on one of the qualities but high or low on both qualities. In all of these new scales, test items are used that "reflect the sociocultural stereotypes of masculinity as a cognitive instrumentality and goal directedness and femininity as an expressive nurturant, interpersonal orientation" (Orlofsky,

1980, p. 66). Four self-report measures of sex-role orientation, using separate Masculinity and Femininity Scales have recently been developed. They include: the Personal Attributes Questionnaire (PAQ), developed by Spence, Helmreich, and Stapp (1975); the PRF ANDRO Scale, developed by Berzins, Welling, and Wetter (1978); Heilbrun's (1976) scale which uses items taken from the Adjective Check List (ACL) (Gough & Heilbrun, 1965); and the Bem Sex-Role Inventory (Bem, 1974).

The Bem Sex-Role Inventory (BSRI) (Bem, 1981) contains 60 personality characteristics: 20 are stereotypically feminine (e.g., affectionate, gentle, understanding), 20 are stereotypically masculine (e.g., dominant, independent, assertive), and 20 are filler items. A subject is asked to indicate on a 7-point scale how well each of the 60 characteristics describes him/herself. The Masculinity and Femininity Scales were derived from a pool of personality characteristics that seemed "positive in value and either masculine or feminine in tone (Bem, 1974, p. 156). The pool items were then rated by college students and those rated significantly more desirable for males than for females served as the final Masculinity Scale while the items rated more desirable for females than for males served as the Femininity Scale. In treating masculinity and

femininity as two independent dimensions, a subject may indicate whether she/he is high on both dimensions ("Androgynous"), low on both dimensions ("Undifferentiated"), or high on one dimension but low on the other (either "Masculine" or "Feminine") (Bem, 1981).

Use of these scales has indicated that the dimensions of masculinity and femininity are independent of each other and that "approximately 35% of college people, when describing themselves on the self-report items, obtain scores on the two scales that are approximately equal. That is, they manifest a balance between so-called masculine and feminine characteristics" (Orlofsky, 1980, p. 658). Bem (1974) referred to these people as "psychologically androgynous".

Bem (1975) regarded traditional sex-roles as restrictive and she found androgyny to be freeing. The androgynous person incorporates into his/her self-concept both traditionally masculine and feminine characteristics. As a consequence, the androgynous individual does not need to avoid certain kinds of adaptive behaviors as inconsistent with his/her self-concept just because these behaviors are often associated with the other sex; in this sense they are more free to actualize all their potentialities. In contrast, the sex-typed person has a narrower self-concept,

because she/he has excluded characteristics or behaviors traditionally identified with the other sex. This person will tend to avoid or be uncomfortable with behaviors labeled appropriate for the other sex. Resultingly, sex-typed individuals often will not be able to act in the most effective manner (Orlofsky, 1980, p. 658).

In the past decade studies have been conducted which empirically test the hypothesized advantages of an androgynous sex-role. Unless otherwise noted, the following studies have used the BSRI to assess sex-role.

Behavioral Validations

Bem (1975) found that Androgynous individuals of both sexes were more likely than either Masculine or Feminine typed individuals to demonstrate sex-role adaptability across situations; that they engaged in situationally effective behavior without regard for its stereotype as more appropriate for one sex or the other. Androgynous subjects showed greater independence (a "masculine" trait) in their judgements and were more resistant to conformity under pressure than Masculine or Feminine subjects. In a second study, in which subjects were given the opportunity to interact with a kitten, Androgynous subjects showed higher levels of nurturant behaviors (a "feminine" trait) in contrast to non-Androgynous subjects who displayed behavioral

deficits, with the Feminine females showing the greatest deficits. The unexpected finding that Feminine female were low in nurturance was further tested in two studies. In one, subjects interacted with a human infant and then listened to a lonely student (Bem, Martyna, & Watson, 1976). Results indicated that the low nurturance of the Feminine female does not include her interaction with humans. Further testing of cross-sex behavior avoidance was done in a second study (Bem & Lenney, 1976) in which subjects were asked to indicate which of a series of paired activities they would prefer to perform for pay while being photographed (e.g., nailing two boards together or winding a package of yarn into a ball). Sex-typed subjects were more likely than Androgynous or sex-reversed subjects to choose sex-appropriate activity and to reject sex-inappropriate activity even though such a choice cost them money. In addition, sex-typed subjects who engaged in cross-sex behavior reported more psychological discomfort and negative feelings about themselves.

Orlofsky and Windle (1978) studied groups in which they related subjects' sex-role categories to levels of interpersonal assertiveness ("masculine" trait) and emotional expressivity ("feminine" trait) as measured by the Thematic Appreciation Test. This tested subjects' motivation to

either preserve their self images as conforming to sex-role stereotypes or to engage in cross-sex behavior. They found that Androgynous and Masculine-typed female students performed well on both tasks; sex-typed subjects performed at a high level on only the sex-specific task; cross-sex-typed males did well at the feminine task but poorly on the assertiveness measure; and Undifferentiated subjects performed at a moderate level on sex-specific tasks but poorly on cross-sex tasks.

The results of such studies indicate that sex-typing does appear to restrict one's functioning in either the instrumental or the expressive domains: Masculine subjects of both sexes were found to be high in independence but low in nurturance; and Feminine subjects of both sexes were high in nurturance but low in independence, while Androgynous subjects of both sexes demonstrated capability of being both independent and nurturant, both instrumental and expressive, both masculine and feminine.

Taken together, these studies offer support that Androgynous individuals possess a broader repertoire of competencies and greater flexibility in their behavior than sex-typed, cross-sex-typed, or Undifferentiated individuals.

Personality Correlates

Ego identity or personality integration as a function of psychological adaptation has been studied in relation to psychological androgyny. Heilbrun (1976) (using the ACL) found that androgyny is associated with the highest level of identity resolution in college students. A number of studies (Bem, 1977; Orlofsky, 1977; Spence, Helmreich, & Stapp, 1975, using PAQ; and Wetter, 1975, using PRF-ANDRO) have found that Androgynous individuals have high self-esteem relative to other sex-role categories. The studies found too that Masculine-typed males and females also have high self-esteem levels but that Feminine-typed and Undifferentiated individuals of both sexes consistently show low self-esteem in relation to the other groups.

These findings were not supported in a study by Jones, Chernovetz and Hannson (1978) which compared Androgynous, sex-typed individuals on a number of attitudinal, personality and behavioral dimensions. On such criteria as gender identification, neurosis, introversion-extraversion, locus of control, self-esteem, confidence in one's ability, helplessness, and sexual maturity, results indicated that flexibility and adjustment were more strongly associated with masculinity for both males and females rather than androgyny. Further, it was found that Feminine subjects,

independent of gender, preferred to become more masculine. Similar findings were reported by Erdwins, Small, and Gross (1980) when they found no significant difference in self-concept between Masculine and Androgynous subjects and that the Masculine group reported significantly lower levels of anxiety. Using the California Psychological Inventory to study personality characteristics in a female sample, Harris and Schwab (1979) found that Androgynous and Masculine females were better adjusted than Feminine or Undifferentiated females. These three studies supported the contention that it is the presence of masculine traits that is crucial to personal adjustment rather than a balance of masculinity and femininity. Finally, in a study of the influence of sex-roles on the development of learned helplessness, Baucom and Danker-Brown (1979) found that the four sex-role types exhibited different behaviors when confronted with a "helpless condition". (Subjects were given unsolvable concept formation problems to solve.) Feminine and Masculine-typed subjects showed cognitive and motivational deficits and a depressed mood; Androgynous subjects showed only a depressed mood; and Undifferentiated subjects were unaffected by the helpless condition. The authors note that study results should be interpreted as the response of various sex-role types to situations in which they lose control and fail.

It was further noted that the Undifferentiated subjects' results were possibly due to Undifferentiated persons expecting to fail and being accustomed to losing control and thus are not upset when this happens.

Social Competency

The question of whether sex-role styles enhance or inhibit adaptive responses in social situations relevant to psychological adjustment was studied by Kelly et al. (1976) as reported by Kelly and Worell (1977). Social skills were tested using a role-playing paradigm in which subjects were asked to role play responses to a partner in various situations designed to elicit either warm, complimentary social skills or refusal assertiveness. The Androgynous subjects were rated as highly effective (e.g., speaking with appropriate loudness, showing lively affect, having few verbal stutters). Masculine and Feminine-typed subjects did not differ from each other and they fell between the Androgynous and Undifferentiated subjects; the latter of whom were rated as highly inept and socially ineffective. Interpreting these results, Kelly and Worell (1977, p. 112) suggest that "complex social responses require modulation of blending of both masculine and feminine-typed skills." They concluded that "androgyny probably represents the upper range of a general social competency dimension."

Psychological Health

Nevill (1977, p. 758) found a strong positive relationship between androgyny and two measures of psychological health: The Tennessee Self-Concept Scale and the Personal Orientation Inventory. The results indicate that the Androgynous individual is capable of living in the here-and-now, of having the values of the self-actualizing person, of being sensitive to self needs and feelings, of expressing feelings in spontaneous action, of liking and accepting one's self, and of developing meaningful relationships with others. Further, the Androgynous individual demonstrated far fewer signs of psychopathology than the sex-typed individual.

In another study which examined self-actualization, Cristall and Dean (1976) compared differences in androgyny among groups of adults of high and low self-actualization. Using Shostrom's Personal Orientation Inventory, results indicated that individuals who are highly self-actualized are also free from strong sex-role stereotypes.

Some of the recent research on fearfulness and anxiety in adults has been concerned with sex-role differences. Maccoby and Jacklin (1974) have found greater fearfulness and anxiety in females though they suggested that in accordance with sex-role learning, women are more likely to

express their fears than men. Carsrud and Carsrud (1979), in examining the relationship of sex-role and levels of defensiveness to self-reports of fear and anxiety, found that Female subjects perceived themselves as experiencing greater fear than either Androgynous or Masculine subjects, regardless of their level of defensiveness. No significant effects were found for either sex-role orientation or level of defensiveness on self-reported anxiety.

Finally, results of a study by Kelly and Worell (1976), using the Berzins-Welling ANDRO Scale of psychological androgyny and the Parent Behavior Form, suggest that sex-role orientations, rather than being independent, uncorrelated dimensions, are distinctly related to parental child-rearing practices, with Androgynous subjects reporting the highest parental warmth and cognitive involvement and Undifferentiated subjects reporting the least involvement.

The Occupation of Nursing

Nursing is a traditionally female occupation and as such has been labeled with feminine sex-role stereotype. Beletz (1974) in a survey of nursing's public image found that the public maintained the traditional images of the nurse as female nurturer, medicator, maid, and physician's assistant and seemed unaware of the more recent changes in

nursing practice, such as clinical specialist, independent practitioner, and researcher.

Characteristics of Nurses

In the past nurses have been described as embodying many of the personality characteristics of the feminine stereotype. Muhlenkamp and Parson (1972) observed in a review of 48 personality studies of nurses reported in Nursing Research from 1960-1970, that nurses, as a group, are characterized by: choosing a helping role, submissiveness and dependency, having high religious and low economic values and having high social interest. These characteristics are consistent with socially prescribed and sanctioned female behaviors. This view of the nurse is congruent with the popular image of the nurse as caring, intuitive, nurturant, passive, submissive, and self-sacrificing (Rogers, 1975; Wolf, 1972; Yeaworth, 1976). Many characteristics identified as masculine sex-role stereotyped have been reported to be low in nurses: career commitment (Davis & Olesen, 1965); creativity, intellectualism, and originality (Brown et al., 1974).

Nursing and Androgyny

The several studies found in a review of the literature regarding sex-role and nursing are limited to student nurse

samples. Hypothesizing that sex-role identity was an important intervening variable in the development of advanced professional images of nursing (as measured by Frank's [1969] Image of Nursing Questionnaire[1] [INQ]) by female nursing students, Stromborg (1976) found that a student's image of nursing was more in harmony when the student's sex-role identity was masculine. It should be noted, however, that sex-role identity was measured on the bipolar Mf scale of the Minnesota Multiphasic Personality Inventory rather than on a two dimensional independent scale.

Ziegler (1977), using the Personal Attributes Questionnaire, compared baccalaureate male and female nursing students and college students. She reported nonsignificant differences in sex-role identity. Further, she found that Androgynous nursing students failed to achieve significantly higher grade point averages, average grades in nursing courses, satisfaction with occupation choice scores, and self-actualization scores. She concluded that in her sample,

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[1]Frank (1969) used 70 image items arranged in a yes-no check list questionnaire. The items examined five specific vocational image components, called "image clusters", which yielded five subscores and a composite score. The questionnaire is scored according to whether the item is either characteristic or not characteristic of the image of nursing advanced by the profession (based on a panel of nurse-educator judges).

androgyny was not associated with measures of more effective behavior in students.

In an investigation of the relationship between sex-role identity and image of nursing (using Frank's INQ), and using two groups of female nursing students; one group at a program entry level, the other group at program exit level, Till (1980) found that exit level students described themselves with more masculine characteristics than did entry level students. This suggests a positive effect of the nursing education program on the endorsement of masculine characteristics for exit level students. Further, Till reported that, in her sample, the level of endorsement of masculine characteristics was positively related to a professional image of nursing. Unlike Stromborg's (1976) report that a masculine sex-role identity was associated with an image of nursing most like that advanced by the profession, Till's (1980) study indicated that it is the level of endorsement of masculine characteristics no matter what the level of endorsement of feminine characteristics that creates the positive association. Stromborg (1976) and Till's (1980) studies demonstrated a discrepancy between the professional image of nursing and the image held by naive recruits. With this in mind, Till (1980) noted that nearly half the graduating students described themselves

in highly feminine terms without high-level endorsement of masculine competency characteristics which theoretically would allow them to function more effectively as professional nurses.

The Ideal Nurse and Sex-Role Identity

Once an individual's sex role identity is established, other influences beyond the home and family strengthen sex-typing of the socialization process: television, books, schools, churches, and other social and cultural institutions are some examples. Exposure to sex-role learning as an indicator of career choice was studied by Looft (1971) who asked first and second grade children what they wanted to be when they grew up and then asked what they thought they would really be. Girls named eight occupations, most frequently nurse and teacher, while boys named 18 different occupations, most frequently football player and policeman. One girl, who wanted to be a doctor said she thought she might actually be a sales clerk. A study on sex-role typing as it relates to career aspirations was conducted by Fisher (1974) at a large Southwestern university. Majors with high female enrollment included dance, speech communication (theater), French, nursing, rehabilitation counseling, and early childhood and elementary education. Majors with less than 20% female enrollment included engineering,

medicine, and political science. Colleges of natural science and business were also low in female enrollment (Fisher, 1974). High female enrollment occurs in those areas in which the roles imply expressiveness, verbal skills, and nurturance of the young and sick (Williams, 1974).

Stereotyping sex-role identity beyond oneself to sex stereotyping of careers may be linked to how a person views the ideal nurse, whether that person is within or outside the profession of nursing. The same processes and forces which mold one's sex-role identity may influence how one idealizes any given occupation within a society. This idea is congruent with reports of the popular image of the nurse as caring, intuitive, nurturant, passive, submissive, and self-sacrificing (Rogers, 1975; Wolf, 1972; Yeaworth, 1976) and with Beletz's (1974) survey finding that the public image of nursing was the female nurturer, medicator, maid, and physician's assistant.

An underlying assumption of this study is that a nurse's sex-role characterization of an idealized nurse is a combined reflection of her own socialization in the profession of nursing (and, by extension, the socialization of her own sex-role identity) and of her idealization of her own self as a nurse. This phenomenon would be in keeping with Leon Festinger's (1957) theory of cognitive dissonance

which assumes that an individual will continually attempt to establish internal harmony or consistency among his or her opinions, attitudes, knowledge, and values (Cardwell, 1973). Applying this theory, if a nurse identified her own sex-role identity as Feminine but characterized the "ideal" nurse's sex-role identity as Androgynous, she would experience disharmony or dissonance which would subsequently motivate a need to establish consistency. Conversely, if a nurse identified her own and the "ideal" nurse's sex-role identity as the same (no matter if they were Feminine, Masculine, Androgynous, or Undifferentiated) she would not experience dissonance. In this regard then, it may be considered tenable to suggest a relationship between an individual's sex-role identity and their characterization of the sex-role identity of the ideal within their chosen profession.

Summary

The literature reviewed in this chapter has been largely focused on sex-role identity, and where found, such studies as they relate to the nursing profession. Major topics included the learning of sex-roles, sex-role identity, traditional and contemporary measurements of sex-role identity, the construct of androgyny and its application to nursing, and a consideration of the ideal nurse and sex-role identity.

Femininity has historically been measured and conceptualized as the polar opposite of masculinity (Constantinople, 1973). The American stereotype of femininity has traditionally included such personality traits as subjectivity, sensitivity, intuitiveness, nurturance, passivity, and dependence (Yeaworth, 1976). However, new concepts of masculinity and femininity and new measurement techniques to study these personality traits have been developed (Bem, 1974; Berzins, Welling, & Wetter, 1978; Constantinople, 1973; Heilbrun, 1976; Spence, Helmreich, & Stapp, 1975).

A new concept of sex-role identity and mental health called androgyny has arisen (Bem, 1974). Research related to the behavior of an androgynous identity for individuals indicates that a person who is androgynous shows: greater situational adaptability, independence under pressure to conform, greater comfort and ease in performing cross-sex behaviors, high levels of self-esteem, positive psychological adjustment, and social competency.

Because nursing has traditionally been a female occupation, it has come to be identified with a feminine sex-role stereotype. Personality studies of nurses (Muhlenkamp & Parson, 1972) and the popular public image of nurses are both reported to contain many components of the traditional feminine sex-role stereotype, while masculine

sex-role stereotypic characteristics are reported to be low in nurses (Brown, et al., 1974; Davis & Olesen, 1965).

Though androgyny studies of nurses which employ the new scales of a two-dimensional model of masculinity and femininity are limited in number, those cited which investigated student nurses either did not find androgyny to be associated with more effective school-related behavior in the sample (Ziegler, 1977) or found that it was the presence of masculine characteristics (despite the level of feminine characteristics) which was associated with an image of nursing (using Frank's INQ) most like that advanced by the profession (Till, 1980).

How female nurses view themselves and the ideal female professional nurse in relation to sex-role identity and what proportion of these views fall into an androgynous category was the topic of this research. As the current professional nurse role utilizes both masculine and feminine personality traits and behaviors, an investigation of how nurses view their own sex-role identity and the sex-role identity of their profession (through the vehicle of an "idealized" nurse) is perhaps appropriate and timely.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This chapter presents the circumstances under which this descriptive correlational study, as classified by Polit and Hungler (1978) was conducted. In fulfilling the aim of descriptive correlational research, this study describes "the relationship among variables rather than infers cause-and-effect relationships" (Polit & Hungler, 1978, p. 185).

Included in this chapter are setting, sample, human rights, instrument, data collection, and treatment of data.

Setting

This study was conducted on three campuses of a medium sized southwestern state-supported university, and at a large southwestern metropolitan hospital. An area in the hospital designated by nursing administration was utilized for completion of research instruments by hospital subjects and the natural classroom setting on the university campus was utilized for instrument completion by the student subjects. Faculty received the research information via the campus nursing department mail system.

Sample

The target population included faculty and students from a large southwestern university college of nursing and clinical nurses at a large southwestern metropolitan hospital. Criteria for sample inclusion was as follows:

Nursing Faculty Member:

1. Female
2. Currently employed in teaching nursing at the baccalaureate level.

Nursing Student:

1. Female
2. First semester senior baccalaureate nursing student.
3. Registered nurses were excluded.

Clinical Nurse:

1. Female
2. Has a Bachelor of Science in Nursing as minimal educational degree.
3. Has a minimum of six months experience in nursing.
4. Holds a staff position.
5. Is a registered nurse.

All participation in the study was voluntary.

Protection of Human Rights

Permission to recruit clinical nurses as subjects was solicited from the hospital. Permission to recruit nursing students and faculty as subjects was obtained from the Dean and Assistant Dean of the College of Nursing.

Protection of the rights and welfare of the subjects included:

1. Anonymity was assured in that no identity was requested on the instruments. Completed instruments for each subject were placed in a sealed envelope.

2. The subjects were informed in a written explanation (Appendix A) that they were in no way obligated to participate and were free to withdraw at any time.

3. A written explanation of the study (Appendix A) was included with the test tool and demographic data sheet.

4. Subjects were encouraged to contact the researcher if they had any questions regarding the study.

Instruments

Two tools were used. One tool, the Short Bem Sex Role Inventory (hereafter referred to as SBSRI), was administered twice: once to collect data on a subject's self-image, and a second time to collect data on a subject's characterization of the "ideal female professional nurse". One half of the sample was instructed to take the "self-image" test

first and one half was instructed to take the "ideal nurse" test first to counterbalance any possible order effects. Written permission to use an altered SBSRI form was received from Peggy Ferris, permissions editor at Consulting Psychologists Press, Inc. on 17 November 1981 (Appendix A). The second tool was a demographic data sheet.

Demographic Data Sheet

Data on age, sex, marital status, ethnic background, number of children, job title, and employment status and information was collected on the demographic data sheet (Appendix B). This data sheet provided further information for each group (see Tables 5, 6, & 7). The groups were then discussed in terms of their demographic similarities and differences.

Short Bem Sex Role Inventory

The SBSRI (Bem, 1981) was utilized to evaluate a subject's sex role identity as it referred to her self image and a sex role identity as it related to her characterization of an "ideal female professional nurse". The SBSRI contains three scales: the Masculinity Scale, the Femininity Scale, and the Social Desirability Scale. There are 10 personality characteristics included in each scale, which are listed in the table shown on page 48 (Table 1). The number preceding

Table 1

Short Bem Sex-Role Inventory Items Grouped According to Masculinity, Femininity, and Social Desirability Scales

Masculine Items		Feminine Items		Filler Items	
28.	Aggressive	2.	Affectionate	21.	Adaptable
7.	Assertive	14.	Compassionate	24.	Conceited
1.	Defend my own beliefs	17.	Eager to soothe hurt feelings	3.	Conscientious
22.	Dominant	29.	Gentle	30.	Conventional
13.	Forceful	26.	Loves children	12.	Jealous
16.	Have leadership abilities	8.	Sensitive to needs of others	6.	Moody
4.	Independent	5.	Sympathetic	9.	Reliable
10.	Strong personality	23.	Tender	18.	Secretive
25.	Willing to take a stand	11.	Understanding	27.	Tactful
19.	Willing to take risks	20.	Warm	15.	Truthful

each item refers to the position of the item in the SBSRI (Bem, 1981).

The SBSRI is derived from the original Bem Sex Role Inventory (hereafter referred to as BSRI). The SBSRI includes exactly half of the BSRI items. All analyses of the SBSRI are based on a rescoring of the BSRI (Bem, 1981).

The BSRI was constructed on two theoretical assumptions (Bem, 1979). First, over time the culture has grouped heterogeneous attributes into two mutually exclusive categories, each category regarded as more characteristic of and desirable for one or the other of the two sexes. It is also assumed that these cultural expectations and prescriptions are well known by members of the culture. Second, individuals differ from one another in how much they utilize these cultural definitions as idealized standards of femininity and masculinity against which their own personality and behavior are to be evaluated. The BSRI presents the subject with a heterogenous collection of attributes (which have been designated by the culture as more desirable for one or the other of the two sexes) and then assesses the degree (using a Likert scale) to which the subject clusters this collection into the two categories.

The BSRI Masculinity and Femininity items were chosen from a pool of 200 personality characteristics that were

judged to be significantly ($p < .05$) more desirable for one sex than for the other (Bem, 1974). Judges used a 7-point scale ranging from 1 ("Not at all desirable") to 7 ("Extremely desirable") to rate each characteristic for desirability. (For example, "in American society how desirable is it for a woman, or man, to be tender?") The judges consisted of 100 undergraduate students at Stanford University in 1972; 50 females, 50 males. A personality characteristic qualified as feminine (or masculine) if it was independently judged by both females and males to be significantly ($p < .05$) more desirable for a woman (or man). Of the 76 characteristics that met these criteria, 20 were selected for the Femininity scale and 20 for the Masculinity scale. A group of 20 filler items which are not scored was selected from a pool of 200 personality characteristics judged to elicit either a positive or negative social desirability response (Bem, 1981).

In development of the SBSRI, feminine and masculine items were selected in order to maximize both the internal consistency of the Femininity and Masculinity scales and the orthogonality between them. Through factor analysis performed for females and males separately on the 40 feminine and masculine items of the BSRI, the SBSRI consists of items that represent the most desirable personality

characteristics for a given sex, and the variances of their social desirability ratings are comparable (Bem, 1981). The 10 unscored or filler items in the SBSRI are those which meet the neutral criterion (no more desirable for one sex than for another) in both the original social desirability test (Bem, 1974) and in the Walkup and Abbott (1978) replication.

The SBSRI contains 30 Likert items. A subject is asked to indicate on a 7-point scale how well each of the 30 characteristics describes herself or himself. The scale ranges from 1 ("Never or almost never true") to 7 ("Always or almost always true"). The scale is labeled at each point. Femininity and Masculinity are treated as two independent dimensions and thus a subject can indicate whether she/he is high on both dimensions ("Androgynous"), low on both dimensions ("Undifferentiated"), or high on one dimension but low on the other (either "Feminine" or "Masculine"). Subjects are classified into sex-role groups on the basis of a median split. Using this method for Bem's normative sample, 23.8% of the females were classified as Feminine, 15.6% as Masculine, 37.1% as Androgynous, and 23.5% as Undifferentiated. For males, the corresponding percents were 16, 32.6, 23.9, and 27.5, respectively (Bem, 1981).

Psychometric analyses of the BSRI was done on two samples of undergraduates in 1973 and in 1978 who were taking

an Introductory Psychology course at Stanford University. All SBSRI analyses are based on a rescoring of the BSRI (Bem, 1981).

To estimate internal consistency, coefficient alpha was computed individually for the Femininity score and the Masculinity score. The table below shows both scores to be highly reliable.

Table 2

Coefficient Alpha for the Femininity and Masculinity Scores for the SBSRI

	Femininity		Masculinity	
	Females	Males	Females	Males
Stanford, 1973	.84	.87	.84	.85
Stanford, 1978	.84	.87	.86	.85

(Bem, 1981)

Test-retest reliability was determined when the BSRI was administered a second time to a group of 56 subjects from the 1973 Stanford sample. Product-moment correlations were computed between the first and second administrations (four weeks apart) which indicated high reliability for the scores. The rescored SBSRI correlations are in Table 3 on page 53.

Table 3

Test-Retest Reliabilities for the Femininity and Masculinity SBSRI Scores

	Females	Males
Femininity	.85	.91
Masculinity	.91	.76

(Bem, 1981)

In an evaluation of validity, the Marlowe-Crowne Social Desirability Scale was administered along with the BSRI to the 56 subjects in the 1973 test-retest sample. The table below shows the rescored SBSRI product-moment correlations between the Marlowe-Crowne Scale and the Femininity and Masculinity scores. The low correlations indicate that the SBSRI scores are not measuring a general tendency to describe oneself in a socially desirable manner (Bem, 1981).

Table 4

Correlation of the SBSRI Femininity and Masculinity Scores with the Marlowe-Crowne Social Desirability Scale

	Females	Males
Femininity	.24	.08
Masculinity	.14	-.08

(Bem, 1981)

In an endeavor to establish further validity for the measurement of psychological androgyny, Bem has conducted a series of studies on instrumental (masculine) and expressive (feminine) functioning. In these studies, one designed to measure independence in the face of pressure to conform (Bem, 1975b) and three to examine nurturance in interactions with a kitten, baby, and a lonely student, respectively (Bem, Martyna, & Watson, 1976), results indicated that only androgynous subjects consistently displayed high levels of behavior in both domains.

Correlation between the BSRI and the SBSRI is high. In the Standford 1973 sample, the correlation on the Femininity scale was .85 and .88 for females and males, respectively and the Masculinity scale correlation was .94 and .93 for females and males, respectively. The 1978 Stanford sample has a correlation of .97 for females and .88 for males on the Femininity score and .94 for both females and males on the Masculinity score (Bem, 1981).

Data Collection

The instrument was administered by the researcher to a class of first semester senior students in January, 1982, in their natural university classroom setting. The clinical nurses received the research forms in January from their respective head nurse who in turn had received them from a

hospital research liaison. The liaison collected the sealed forms and returned them to the researcher. All undergraduate nursing faculty on two campuses of the university were mailed the instrument and study information through the nursing department mailing system. The faculty were instructed to return the packs to the graduate secretary's desk within 10 days of receiving them (Appendix A). The researcher obtained the sealed envelopes from the graduate secretary. Males were excluded from the sample and registered nurses were excluded from the student group.

All subjects were informed in a written statement (Appendix A) that they were in no way obligated to participate and were free to withdraw at any time. Anonymity was assured by requesting that no identifying information be placed on the instrument and by requesting that all subjects seal the completed instrument in provided unmarked envelopes. Subjects were asked to respond to all items of the instrument in accord with written directions.

Treatment of Data

Each completed instrument was assigned a group code number (student, faculty, clinical nurse) before the data was taken from the instrument and scored. Demographic data was compiled in chart form for each group (Charts 5, 6, & 7), and discussed according to groups. Included in each group chart

were the individual SBSRI scores for the "self" and the "ideal" nurse.

The SBSRI was hand scored according to the following procedure (Bem, 1981):

> 1. Each subject's Femininity and Masculinity score was calculated.
> 2. The median Femininity and Masculinity SBSRI scores of 5.50 and 4.80, respectively, were utilized based on a rescoring of the SBSRI from Bem's 1975 normative sample of Stanford undergraduate students.
> 3. Both scores (self-image and ideal nurse) of each subject were classified as Feminine, Masculine, Androgynous, or Undifferentiated on the basis of a median split. (Till, 1978)

Data was then coded in a form appropriate for computer analysis. Statistical treatment of the data consisted of:

1. For hypotheses 1 and 2, the chi square goodness of fit to determine if the percentage of individuals in the sex role categories of the sample differed significantly from the percentage of individuals in the normative categories.

2. For hypothesis 3, the chi square test of independence to determine if there were differences among the three groups (student, faculty, clinical nurses) of percentage of characterizations of the ideal nurse in the sex role categories.

3. For hypothesis 4, the chi square test of independence for each group (students, faculty, clinical nurses) to determine if there were differences in sex role category

between a subject's reported self-image and her characterization of the "ideal female professional nurse". A second chi square test of independence was done to determine the difference between the two scores for each group.

4. From data collected from the hypotheses, intersample and intergroup comparisons were tested for significance using a "difference between two proportions" statistical test (Freund, 1979, p. 318).

The decision level for all analyses was the .05 alpha.

Summary

The study was conducted with the SBSRI instrument. Validity and reliability of the tool were assessed by Bem (1981). The non-random sample included senior nursing students, undergraduate nursing faculty, and clinical registered nurses. All subjects received written information regarding the study and their rights. Chi square goodness of fit and chi square test of independence were used to test the hypotheses as delineated, and the decision level for rejection of each null hypothesis was $\alpha < 0.05$.

CHAPTER 4

ANALYSIS OF DATA

A descriptive correlational design was employed to answer the question: To what extent do student nurses, nursing faculty, and clinical nurses identify androgyny in themselves and in their idealization of the professional nurse? The data that were collected to answer this question by means of two questionnaires from 73 baccalaureate nursing students, baccalaureate faculty nurses, and clinical registered nurses will be presented in this chapter.

Description of Sample

A total of 76 nursing students, faculty, and clinical nurses answered the demographic sheet and Bem's short BSRI. Of that number, 20 were nursing students, 22 were faculty, and 34 were clinical nurses. Three of the clinical nurses did not meet the delimitations: one was a diploma school nurse; one was an associate degree nurse; and one failed to include the demographic sheet by which study delimitations could be assessed. This left the clinical nurse group size at 31 and a total sample size of 73. The sample will first be discussed according to groups, followed by intergroup comparisons.

The median age of the student group was 26 years with a range of 22-39 years. Of the 19 who identified their races, 17 were white (85%), one was black (5%), and one was Asian American (5%). Ten (50%) of the students were single, eight (40%) were married, and two (10%) were divorced. Seven (35%) of the students stated that they had children, and the number of children ranged from one to four. All but two of the students' highest level of education was first semester baccalaureate degree senior. Those remaining two held bachelor's degrees in areas outside of nursing. On the short BSRI which measured their own sex-role category, nine students (45%) identified themselves as Androgynous, one (5%) as Masculine, five (25%) as Feminine, and five (25%) as Undifferentiated. Fourteen of the students (70%) characterized the "ideal female professional nurse" as Androgynous, two (10%) as Masculine, one (5%) as Feminine, and three (15%) as Undifferentiated. Table 5 shows demographic characteristics for each student subject.

In the faculty group the median age was 40 years with a range of 27-64 years. All faculty who identified their race were white. The majority (14 or 64%) were married while two were single, five divorced, and one separated. Twelve faculty members had children ranging from one to four in number. One faculty nurse had a Ph.D. and the

Table 5

Demographic Characteristics of Nursing Students

Subject	Age	Race	Single	Married	Divorced	Number of Children	First Semester Senior Nursing Student	Bachelor's	Self-Image	"Ideal Nurse" Image
1	30	Black		X		-	X		A	A
2	29	W	X			0	X		A	U
3	22	W	X			0	X		U	A
4	22	W	X			0	X		U	U
5	22	W		X		0	X		M	M
6	38	W		X		4	X		A	A
7	33	W			X	1	X		A	A
8	25	W	X			0		X	F	F
9	26	W	X			0	X		U	U
10	22	W	X			-	X		A	A
11	27	W	X			0	X		A	A
12	26	W		X		0	X		U	A
13	35	W		X		2	X		U	M
14	39	W			X	2		X	A	A
15	24	Asian Amer.		X		1	X		F	A
16	29	W		X		2	X		F	A
17	22	W	X			0	X		A	A
18	23	W	X			0	X		F	A
19	24	W	X			0	X		F	A
20	29	-		X		1	X		A	A

A = Androgynous M = Masculine F = Feminine U = Undifferentiated

remainder held Master's degrees as their highest level of education. The median year that they had graduated from a bachelor's program nursing school was 1964; the range of years was 1945-1975. Nineteen faculty were full-time and three taught part-time. Three held the rank of lecturer, nine were instructors, nine were assistant professors, and one was an associate professor. Of these, 15 had held their positions from 1-5 years, five had held them for more than 5 years, and two for less than 1 year. Twelve faculty identified their specialty area as medical-surgical nursing, five listed maternal child health, two listed pediatrics, and one each listed psychiatry and community health nursing. Time spent at their present university ranged from 5 months to 15 years, with an average length of stay approximately 4.9 years. However, nine faculty have spent between 5-10 years in the nursing profession and thirteen have practiced nursing more than 10 years. On the short BSRI, eight (36.36%) faculty identified themselves as Androgynous, seven (31.82%) as Masculine, three (13.64%) as Feminine, and four (18.18%) as Undifferentiated. Eight (36.36%) characterized the "ideal nurse" as Androgynous, ten (45.45%) as Masculine, three (13.64%) as Feminine, and one (4.55%) as Undifferentiated. Table 6 illustrates demographic characteristics for individual faculty subjects.

Table 6

Demographic Characteristics of Faculty Nurses

Subject	Age	Race	Single	Married	Divorced	Separated	No.of Children	Masters	Ph.D.	Yr. Grad. from B.S.N.	Practice Area	Job Title	No.of Yrs.at Present Job Title	Full or Part Time	Time at this Institution	Yrs. in Nsg.	Self-Image	"Ideal Nurse" Image
1	40	W		X			0	X		1964	Mater-Child	Ass't.Prof.	2½	F	2½	+10	M	A
2	47	W			X		0	X		1958	Med-Surg	Ass't.Prof.	4	F	4	+10	U	M
3	31	W			X		0	X		1973	Med-Surg	Ass't.Prof.	5	F	5	5-10	M	M
4	35	W		X			1	X		1968	Mater-Newborn	Ass't.Prof.	5	P	9	+10	A	M
5	--	W		X			2	X		1968	Med-Surg	Instructor	3	P	-	+10	M	M
6	55	W			X		0	X		1946	Med-Surg	Ass't.Prof.	13	F	7	+10	M	M
7	46	-		X			4	X		1956	Med-Surg	Ass't.Prof.	1	F	1	+10	A	A
8	64	W				X	0	X		1945	OB	Instructor	8	F	8	+10	M	M
9	48	W		X			2	X		1955	Psyc	Ass't.Prof.	10	P	6	+10	M	A
10	50	-		X			2	X		1953	Med-Surg	Instructor	4	F	4	+10	F	F
11	45	W		X			2	X		1959	Community	Ass't.Prof.	4	F	15	+10	A	A
12	48	-			X		2		X	1962	Med-Surg	Assoc.Prof.	10	F	10	5-10	M	U
13	29	W		X			0	X		1974	Med-Surg	Instructor	2½	F	-	5-10	A	M
14	30	W	X				0	X		--	--	Instructor	1	F	1	5-10	U	M
15	34	W		X			1	X		1971	Med-Surg,Pedi	Instructor	3	F	3	5-10	A	M
16	34	W			X		2	X		1970	Med-Surg	Instructor	3	F	3	5-10	U	A
17	27	W		X			0	X		1974	Med-Surg,Pedi	Instructor	4	F	4	5-10	F	F
18	37	W		X			2	X		1966	Pedi	Ass't.Prof.	4	F	6	+10	A	A
19	43	W		X			3	X		1960	Med-Surg	Instructor	10	F	1½	+10	A	A
20	28	W		X			1	X		1975	Pedi	Lecturer	5 mos.	F	5 mos.	5-10	U	M
21	45	W	X				0	X		1954	Maternity	Lecturer	2	F	7	+10	F	F
22	30	W		X			0	X		1974	MCH,Med-Surg	Lecturer	6 mos.	F	6 mos.	5-10	A	A

A = Androgynous M = Masculine F = Feminine U = Undifferentiated

The median age of the clinical nurse group was 27 years. The age range was 23-46 years. Of those who responded to the race item, 24 stated they were white, one was black, and three were of Spanish-American origin. Twenty of this group were single (64.5%), ten were married (32.3%), and one (3.2%) was divorced. Seven (22.6%) had children and those who did had either one or two children. Two of the clinical nurses held Master of Science degrees, one a Master of Arts degree, and the remainder had Bachelor's degrees. The median year of graduation from a bachelor nursing program was 1979 with a range of graduation dates from 1956-1981. Twenty-six nurses identified themselves as staff nurses, one was a charge nurse, two were assistant nurse coordinators, and two held Nurse Coordinator I positions. Five of these nurses had held their positions for more than 5 years, fifteen had held them from 1-5 years, and 11 had held their job titles less than 1 year. The majority of this group (26 or 83.9%) practiced nursing in a medical-surgical area; three were in obstetrics-gynecology, and three in psychiatry. Twenty-eight nurses worked full-time and three worked part-time. Time spent working in this particular hospital ranged from 2 months to 8½ years, but the years spent in the profession of nursing by this group was greater. The breakdown was as follows:

6 months - 1 year = 4

1 year 5 years = 15

5 years - 10 years = 9

More than 10 years = 3

In the clinical nurse group, 10 (32.26%) scored themselves as Androgynous, 13 (41.94%) as Masculine, three (9.6%) as Feminine, and five (16.13%) as Undifferentiated. On the "ideal nurse" short BSRI, nine (29.03%) characterized her as Androgynous, 14 (45.16%) as Masculine, three (9.68%) as Feminine, and five (16.13%) as Undifferentiated. Demographic characteristics for individual clinical subjects can be viewed in Table 7.

In an empirical comparison of demographic data of the three groups, the median age for students was 26 years while the median age for clinical nurses was 27 years. For faculty, the median age was 40 years. The faculty, as a group, were married in 64% of the cases while 40% of the students were married and 32.3% of the clinical nurses were married.

As a group, clinical nurses have spent significantly less time at their present institution ($z = 2.712$, $p > .05$), and in their present job titles ($z = 2.965$, $p > .05$) than have the faculty group. This is not a surprising finding

Table 7

Demographic Characteristics of Clinical Nurses

Subject	Age	Race	Single	Married	Divorced	Separated	No.of Children	M.S.	M.A.	Yr. Grad. from B.S.N.	Practice Area	Job Title	No.of Yrs.at Present Job Title	Full or Part Time	Time at this Institution	Yrs. in Nsg.	Self-Image	"Ideal Nurse" Image
1	25	W	X				0			1980	Med-Surg	Staff	1	F	2	1-5	M	A
2	25	W	X				0			1980	Orthopedics	Staff	1		2½	1-5	M	M
3	27	W	X				0			1977	Neonatal ICU	Staff	4½	F	3	5-10	A	M
4	23	W	X				0			1981	Labor & Deliv	Staff	7 mos.	F	7 mos.	6mo-1yr	M	M
5	37	-	X				0			1974	Surgery	Staff	7½	F	-	+10	M	M
6	28	W	X				0			1976	Recovery	Staff	5	F	1	5-10	M	U
7	30	W	X				0			1973	Day Surgery	Staff	8½	F	8½	5-10	A	A
8	34	W		X			0			1968	Recovery, ER	Staff	7 mos.	F	8	+10	U	A
9	23	W	X				0			1980	SICU	Staff	9 mos.	F	1½	1-5	F	F
10	36	S.A.		X			1		X	1979	Med-Surg	Staff	2	P	2	1-5	U	U
11	28	S.A.		X			0			1976	Surg, ICU	Staff	5½	F	5½	5-10	A	A
12	26	S.A.	X				0			1979	Surgery	Staff	2	F	2	1-5	M	A
13	27	Blk.	X				0			1978	Surgery	Staff	1	F	14 mos.	1-5	A	A
14	25	W	W				0			1978	Burn	Staff	3½	F	3½	1-5	U	U
15	33	W		X			2			1971	Trauma	Staff	7 mos.	P	7 mos.	+10	F	U
16	27	W	X				0			1980	ICU	Staff	1½	F	1½	1-5	A	M
17	29	W	X				0			1976	Medicine	Staff	6	F	7	5-10	M	A
18	36	W			X		1			1979	Psych	Coordinator	1	F	3	1-5	M	M
19	28	W		X			2			1981	Psych	Staff	8 mos.	F	8 mos.	6mo-1yr	A	M
20	27	-		X			1			1977	ICU	Ass't.Coord.	2	F	5	1-5	M	U
21	25	W	X				0			1980	Medicine	Staff	1½	F	1½	1-5	A	M
22	26	W	X				0			1980	ICU/CCU	Ass't.Coord.	7 mos.	F	3½	1-5	M	A
23	30	W		X			2	X		1972	Oncology	Staff	9	F	15 mos.	5-10	M	F
24	46	W	X				0	X		1956	Psych	Staff	2 mos.	P	2 mos.	5-10	U	M
25	29	-	X				-			1975	Gyn-Oncology	Staff	5 mos.	F	5 mos.	5-10	F	M
26	23	W		X			0			1980	Gyn-Oncology	Staff	2	F	1½	1-5	A	M
27	30	W	X				0			1979	Neurosurgery	Charge	2	F	2	1-5	M	A
28	24	W	X				0			1981	Neurosurg ICU	Staff	7 mos.	F	7 mos.	6mo-1yr	A	M
29	24	W		X			1			1981	Neonatal ICU	Staff	7 mos.	F	7 mos	6mo-1yr	U	M
30	31	W		X			0			1973	Pulmonary	Coord. I	4 mos.	F	3½	5-10	M	M
31	24	W	X				0			1980	Neonatal ICU	Staff	1½	F	1½	1-5	A	F

A = Androgynous M = Masculine F = Feminine U = Undifferentiated

considering the median year of graduation from nursing school for clinical nurses (1979) and nursing faculty (1964).

Regarding sex-role identity as it related to themselves, the faculty and clinical groups tended to view themselves as either Androgynous or Masculine, while the student group most frequently viewed themselves as Androgynous and least frequently as Masculine. The findings were similar for characterizations of the sex-role identity of the "ideal nurse". Further discussion of this topic is continued below in a consideration and analyses of the hypotheses.

Hypothesis 1[2]

The first hypothesis was as follows: There will be no difference in the percentage of individuals in the four sex-role categories for Bem's female Stanford sample and for the female sample tested. Table 8 presents the percentage of subjects in each sex-role category for the three nursing samples: student, faculty, and clinical nurses and for the normative Stanford Sample.

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[2]Format for charts and presentation of findings from Till, 1978.

Table 8

Percentage of Subjects in Sex-Role Categories for Student, Faculty, and Clinical Nurses and the 1978 Sample of Female Stanford Undergraduates on the Short BSRI Using the Median-Split Method

Sex-Role	Student $\underline{n}$ = 20	Faculty $\underline{n}$ = 22	Clinical $\underline{n}$ = 31	Combined $\underline{n}$ = 73	Stanford* $\underline{n}$ = 340
Androgynous	45	36.36	32.26	36.99	37.1
Masculine	5	31.82	41.94	28.77	15.6
Feminine	25	13.64	9.67	15.06	23.8
Undifferentiated	25	18.18	16.13	19.18	23.5

*From Bem, 1981, p. 31, Table D-1, for female subjects on the Short BSRI.

Hypothesis 1 was tested using the chi-square goodness-of-fit test (all hypotheses were set at .05 alpha). The expected number in each of the four sex-role categories for the combined group of three nurse samples was mathematically derived based on the percentage of Stanford females in each of the categories (Table 9).

The analysis yielded a significant difference ($p < .012$) between the total nurse sample and the Stanford female normative sample. Based on these findings Ho_1 was rejected.

Table 9

Chi-Square Analysis Comparing Sex-Role Identity of Total Nurse Sample with Stanford Females

Sex-Role Category	Nurse Sample (Observed) $n = 73$	Stanford (Expected)
Androgynous	27	27.083
Masculine	21	11.388
Feminine	11	17.374
Undifferentiated	14	17.155

$x^2 = 11.03$
$df = 3$
$p < .012$

The significant numerical differences between the two samples lie in the Masculine category. More nurse subjects were categorized as Masculine than was expected based on the Stanford numbers ($z = 1.9198$, $p < .05$).

Hypothesis 2

The second hypothesis was: There will be no difference in the percentage of individuals in the four sex-role categories for Bem's female Stanford sample and for subject's characterization of the "ideal female professional nurse". Table 10 presents the percentage of subjects in the three

nursing samples who identified the "ideal female professional nurse" as Androgynous, Masculine, Feminine, or Undifferentiated and the self-rating normative Stanford sample.

Table 10

Percentage of Subjects Identifying the "Ideal Female Professional Nurse" in Sex-Role Categories for Student, Faculty, and Clinical Nurses and the 1978 Sample of Female Undergraduate Self-Ratings on the Short BSRI Using the Median-Split Method

Sex-Role	Student n = 20	Faculty n = 22	Clinical n = 31	Combined n = 73	Stanford* n = 340
Androgynous	70	36.36	29.03	42.47	37.1
Masculine	10	45.45	45.16	35.61	15.6
Feminine	5	13.64	9.68	9.59	23.8
Undifferentiated	15	4.55	16.13	12.33	23.5

*From Bem, 1981, p. 31, Table D-1 for female subjects on the Short BSRI.

Hypothesis 2 was tested using the chi-square goodness-of-fit test. As with hypothesis 1, the expected number in each of the four sex-role categories for the combined group of three nurse samples was mathematically derived based on the percentage of Stanford females in each of the categories (Table 11).

Table 11

Chi-Square Analysis Comparing "Ideal Female Professional Nurse" Sex-Role Identity of Total Nurse Sample with Self Sex-Role Identity of Stanford Females

Sex-Role Category	Nurse Sample (Observed)	Stanford (Expected)
Androgynous	31	27.083
Masculine	26	11.388
Feminine	7	17.374
Undifferentiated	9	17.155

$\underline{x}^2 = 29.39$
$\underline{df} = 3$
$\underline{p} < .001$

The analysis yielded a significant difference ($\underline{p} < .001$) between the total nurse sample and the Stanford female normative sample. Based on these findings Ho_2 was rejected.

In the case of hypothesis 2, the significant differences between the two samples were found in the Masculine ($\underline{z} = 2.7767$, $\underline{p} > .05$), Feminine ($\underline{z} = 2.3068$, $\underline{p} > .05$), and Undifferentiated ($\underline{z} = 1.767$, $\underline{p} > .05$) categories. More nurse subjects categorized the "ideal female professional nurse" as Masculine than was expected and fewer categorized the ideal nurse as Feminine or Undifferentiated.

Hypothesis 3

The third hypothesis stated that: There will be no difference in the percentage of characterizations of the "ideal female professional nurse" in the four sex-role identity categories among the following three groups:

1. Senior nursing students
2. Nursing faculty
3. Clinical nurses

Hypothesis 3 examines whether there are any differences among the three sets of observed frequencies of sex-role categories for the three nursing groups. Table 10 shows the percentage of characterizations of the "ideal nurse" in the four sex-role categories for each group. A 3 (nurse group) x 4 (sex-role orientation of "ideal female nurse") chi-square test of independence was used to test hypothesis 3 (Table 12).

The analysis yielded significant differences ($p = .01$) among the three nurse groups. Consequently Ho_3 was rejected. Table 12 shows that nursing students rated the "ideal nurse" as Androgynous more frequently than expected and as Masculine less frequently than expected. The reverse was true for both faculty and clinical groups who both rated the "ideal nurse" as Masculine more frequently than expected and Androgynous less frequently than expected. Table 12

reveals, however, that half of the expected cell frequencies (in the Feminine and Undifferentiated categories) were less than 5; this violates one of the chi-square statistic assumptions. Therefore, results should be interpreted with caution.

Table 12

Chi-Square Analysis Comparing the "Ideal Female Professional Nurse's" Sex-Role Category Among Student, Faculty, and Clinical Nurse Groups

Sex-Role		Student $n = 20$	Faculty $n = 22$	Clinical $n = 31$
Androgynous	Observed	14	8	9
	Expected	8.493	9.342	13.164
Masculine	Observed	2	10	14
	Expected	7.123	7.836	11.041
Feminine	Observed	1	3	3
	Expected	1.918	2.110	2.973
Undifferentiated	Observed	3	1	5
	Expected	2.466	2.712	3.822

$x^2 = 12.532$
$df = 6$
$p = .01$

Hypothesis 4

Hypothesis 4 was: There will be no difference in sex-role categories between a subject's reported self-image and her characterization of the "ideal female professional nurse".

For purposes of statistical testing, Ho_4 was analyzed using four separate chi-square tests of independence. The first three chi-squares tested differences between the self and "ideal" sex-role categories within the three groups: (1) students, (2) faculty, and (3) clinicians. The results from these groupings are referred to as Ho_{4a} (within student group differences), Ho_{4b} (within faculty group differences), and Ho_{4c} (within clinical group differences). Differences between the self and "ideal" sex-role categories between the three groups were analyzed with a fourth chi-square test of independence and this analysis is identified as Ho_{4d}.

Hypotheses Ho_{4a}, Ho_{4b}, and Ho_{4c} were all tested using a 4 (sex-role category for self-image) x 4 (sex-role category for the "ideal nurse") chi-square test of independence. Data and results are presented in Tables 13, 14, and 15 on the following pages.

The analysis found significant differences (Ho_{4a}: p = .001; Ho_{4b}: p = .001; Ho_{4c}: p = .039) within each of the

Table 13

Chi-Square Analysis Comparing "Self" Sex-Role Identity with "Ideal Nurse" Sex-Role Identity for Nursing Student Group

		Ideal Nurse			
		Androgynous	Masculine	Feminine	Undifferentiated
Self-Image: Androgynous	Observed	8	0	0	1
	Expected	6.300	0.900	0.450	1.350
Masculine	Observed	0	1	0	0
	Expected	0.700	0.100	0.050	0.150
Feminine	Observed	4	0	1	0
	Expected	3.500	0.500	0.250	0.750
Undifferentiated	Observed	2	1	0	2
	Expected	3.500	0.500	0.250	0.750

$\underline{x}^2 = 17.947$
$\underline{df} = 9$
$\underline{p} = .001$
$\underline{n} = 20$

Table 14

Chi-Square Analysis Comparing "Self" Sex-Role Identity with "Ideal Nurse" Sex-Role Identity for Faculty Nurse Group

			Ideal Nurse			
			Androgynous	Masculine	Feminine	Undifferentiated
Self-Image	Androgynous	Observed	5	3	0	0
		Expected	2.909	3.636	1.091	0.364
	Masculine	Observed	2	4	0	1
		Expected	2.545	3.182	0.955	0.318
	Feminine	Observed	0	0	3	0
		Expected	1.091	1.364	0.409	0.136
	Undifferentiated	Observed	1	3	0	0
		Expected	1.455	1.818	0.545	0.182

$\underline{x}^2 = 26.449$
$\underline{df} = 9$
$\underline{p} = 0.001$
$\underline{n} = 22$

Table 15

Chi-Square Analysis Comparing "Self Sex-Role Identity with "Ideal Nurse" Sex-Role Identity for Clinical Nurse Group

			Ideal Nurse			
			Androgynous	Masculine	Feminine	Undifferentiated
Self-Image	Androgynous	Observed	3	6	1	0
		Expected	2.903	4.516	0.968	1.613
	Masculine	Observed	5	5	1	2
		Expected	3.774	5.871	1.258	2.097
	Feminine	Observed	0	1	1	1
		Expected	0.871	1.355	0.290	0.484
	Undifferen-tiated	Observed	1	2	0	2
		Expected	1.452	2.258	0.484	0.806

$\underline{x}^2 = 8.359$
$\underline{df} = 9$
$\underline{p} = 0.039$
$\underline{n} = 31$

groups in reporting self-image and characterization of the "ideal female professional nurse". Thus, the levels of a, b, and c for Ho_4 were rejected. It must be noted that in Tables 13, 14, and 15 there are numerous expected cell frequencies of less than 5 which violates one of the chi-square assumptions. Therefore, findings should be accepted with caution.

In order to determine the differences between the self and the "ideal" sex-role categories between the three groups a fourth chi-square analysis was developed. From Tables 13, 14, and 15 tallies were made of the "self" sex-role category and the "ideal" sex-role category for subjects in each group. From this, it was established if a subject reported a difference between the self and "ideal" categories, or if she reported no difference between the two. From this information, a 2 (difference or no difference) x 3 (student, faculty, and clinical group) chi-square test of independence was done which compared the differences in the two scores among the three groups. Though this analysis provided information on whether subjects reported a difference between their self and "ideal" sex-role categories, it did not identify in which sex-role categories the differences lay. That particular information was lost due to the nature of the chi-square test. Table 16 presents these results.

Table 16

Chi-Square Analysis on the Differences between Self Sex-Role Identity and "Ideal Nurse" Sex-Role Identity for Student, Faculty, and Clinical Nurses

		Students	Faculty	Clinical
Difference between Self and Ideal Nurse Sex-Role Identity	Observed	8	10	20
	Expected	10.411	11.452	16.137
No Difference between Self and Ideal Nurse Sex-Role Identity	Observed	12	12	11
	Expected	9.589	10.548	14.863

$\underline{x}^2 = 3.477$
$\underline{df} = 2$
$\underline{p} = 0.176$
$\underline{n} = 73$

The analysis yielded no significant differences (p = .76; an alpha of .05 had been established) between the groups in reporting self-image and characterization of the "ideal female professional nurse". Based on these findings, Ho_{4d} was retained.

Additional findings of interest to the researcher but not covered by the hypotheses in this study may warrant further investigation. For example, counting the responses from each group, the author found that there were differences among the three nurse groups in characterizing sex-role category of the "ideal female professional nurse". Faculty and clinical nurses characterized the ideal nurse predominantly as either Androgynous or Masculine. Further, both these groups endorsed the "ideal" as Masculine a higher percentage of the time than they endorsed themselves as Masculine. The student group most often characterized the "ideal nurse" as Androgynous. In addition, students endorsed the "ideal nurse" as Androgynous 25% more frequently than they endorsed themselves as Androgynous.

As hypothesis 4 indicated, significant differences between a subject's own sex-role identity and how she characterized the sex-role identity of the "ideal nurse" were found to exist within all three groups of nurses. An examination of Tables 13, 14, and 15 revealed that for students,

the greatest difference between self and ideal sex-role categories was the self-Feminine/ideal-Androgynous, with 20% of the students falling in this category. The faculty group's greatest differences, as observed from the responses, were evenly split between the self-Androgynous/ideal-Masculine and the self-Undifferentiated/ideal-Masculine categories with 13.6% of the group in each. The clinical group had most of its self and ideal sex-role category differences in the self-Androgynous/ideal-Masculine category (19.3%) followed by the self-Masculine/ideal-Androgynous category (16%). Possible implications of these findings will be discussed in Chapter 5.

Summary

Data volunteered from female baccalaureate nursing students, nursing faculty, and clinical nurses regarding their own sex-role identity and that of an "ideal female professional nurse" demonstrated that the sample tested was significantly different in sex-role identity, both for the "self" and the "ideal", from a Stanford sample of women. Based on these findings Ho_1 and Ho_2 were rejected. Also demonstrated through statistical testing was that there were significant differences among the student, faculty, and clinical nurse groups in the percentage of characterizations identified for the "ideal female professional nurse" in the

four sex-role identity categories. Resultingly, Ho_3 was rejected. Finally, in examining differences in sex-role categories between a subject's reported self-image and her characterization of the "ideal female professional nurse", analysis found significant differences <u>within</u> each of the groups. Thus Ho_{4a}, Ho_{4b}, and Ho_{4c} were rejected. However, for Ho_{4d} (differences between the self and "ideal" sex-role categories <u>between</u> the three groups) analysis revealed that there was no significant difference on how the groups scored their own and the ideal nurse's sex-role identity. Thus Ho_{4d} was accepted.

CHAPTER 5

SUMMARY OF THE STUDY

The present study examined the nature of the sex-role identity of three groups of nurses--senior baccalaureate nursing students, baccalaureate faculty members, and clinical nurses who were working in a hospital. It also identified subjects' images of the "ideal female professional nurse" as characterized by sex-role identity and examined the relationship between the sex-role categories of subjects' reported self-image and their "ideal nurse" image. A summary of the study will be presented, followed by a discussion of the findings, conclusions, implications of the findings, and recommendations for further research.

Summary

The descriptive correlational approach was employed to investigate three issues: first, to identify the characterization of the "ideal female professional nurse" based on sex-role categories labeled Androgynous, Masculine, Feminine, or Undifferentiated (Bem, 1974) in three groups of nurses--baccalaureate senior students, faculty, and clinicians; second, to determine the relationship among senior nursing

students, nursing faculty, and clinical nurses in their characterizations of the "ideal female professional nurse"; and third, to determine the relationship between reported self-image as characterized by sex-role category (Bem, 1974) and characterization of the "ideal female professional nurse" within and between the groups.

The sample was obtained from three campuses of a medium-sized Southwestern state-supported university and a large Southwestern metropolitan hospital. Questionnaires were distributed to a class of first semester seniors in their classroom setting, to faculty through a campus nursing department mail system, and to clinical nurses by a hospital administration liaison who gave the questionnaires to department head nurses who subsequently distributed them to registered nurses under their supervision. All nurses in the study were female. In addition, all nursing students were first semester baccalaureate degree seniors and were not registered nurses, all faculty were currently employed in teaching nursing at the baccalaureate level, and each clinical nurse held a Bachelor of Science degree in nursing as a minimal educational level and had at least 6 months experience in nursing. Three of the clinical subjects who answered the questionnaire did not meet the delimitations of the study. They had either not graduated from a

baccalaureate program or had incorrectly filled out the questionnaire, rendering it void. Although a total of 76 nurses answered Bem's (1974) Short BSRI, only 73 participants contributed data to the study.

Leon Festinger's (1957) theory of cognitive dissonance was employed to examine the relationship between a nurse's self concept (as defined by the sex-role category of herself) and her professional role concept (as defined by the sex-role category of the ideal professional nurse). The theory assumes that an individual will attempt to establish harmony or consistency among his/her attitudes, opinions, knowledge, and values (Cardwell, 1973). Contrary to the theoretical expectation of finding consonance between the concepts of self-image and ideal nurse image, it was found that within the groups there were significant differences in the concepts held between the self and the ideal nurse as defined by sex-role category.

The review of the literature addressed sex-role development and identity, androgyny, nursing and androgyny, and the ideal nurse as related to sex role identity. From the review it was concluded that concepts of femininity in American culture have traditionally included such personality traits as subjectivity, sensitivity, intuitiveness, nurturance, passivity, and dependence (Yeaworth, 1976).

Further, as a traditionally female occupation, nursing has come to be identified with a female sex-role stereotype (Brown et al., 1974; Davis & Oleson, 1965; Muklenkamp & Parson, 1972). Femininity has historically been measured and conceptualized as the polar opposite of masculinity (Constantinople, 1973) but development of new bipolar measurement techniques of those personality characteristics in the last decade (Bem, 1974; Berzins, Welling, & Wetter, 1978; Constantinople, 1973; Heilbrun, 1976; Spence, Helmrich, & Stapp, 1975), along with the rise of the Women's Movement during this same time frame, has forged a new concept of sex-role identity and mental health called androgyny (Bem, 1974). The androgynous individual endorses a high number of both feminine and masculine psychological traits (Bem, 1974). Research on androgyny indicates that an androgynous individual demonstrates: situational adaptability, independence under pressure to conform (Bem, 1975), comfort and ease in performing cross-sex behaviors (Bem & Lenny, 1976), high levels of self-esteem (Bem, 1977; Orlofsky, 1977; Spence, Helmreich, & Stapp, 1975; Wetter, 1975), positive psychological adjustment (Nevill, 1977), and social competency (Kelly & Worell, 1977). In studies of nursing students and androgyny which used bipolar measurements of masculinity and femininity, Ziegler (1977) did not find

androgyny to be associated with more effective school-related behaviors, and Till (1980) found that it was the presence of masculine characteristics (regardless of the level of feminine characteristics) which was associated with student nurses' images of nursing most similar to those advanced by the profession of nursing.

The data collected from the 73 study subjects were first analyzed by chi-square goodness-of-fit tests. These statistical tests concluded a significant difference in the percentage of individuals in the four sex-role categories for Bem's female Stanford sample and for the subjects tested, and a significant difference in the percentage of individuals in the four sex-role categories for Bem's female Stanford sample and for the subject's characterizations of the "ideal female professional nurse". Thus, Ho_1 and Ho_2 were rejected.

The data were also analyzed by the chi-square test of independence. The statistical tests found that there were significant differences among the three groups tested in how they characterized the sex-role identity of the "ideal female professional nurse". These statistical analyses also found that there were differences within groups but not between groups in the sex-role categories between a subject's reported self-image and her "ideal

nurse" image. Consequently, Ho_3 and Ho_{4a}, Ho_{4b}, and Ho_{4c} were rejected and Ho_{4d} was retained.

Discussion of Findings

Discussion of study results will be organized around the following topics: the sex-role identity of the sample, characterizations of the "ideal professional nurse" of the sample, and the relationship of self sex-role identity and "ideal nurse" sex-role identity for this sample.

Sex-Role Identity

A considerable portion of the literature on nurses and nursing supports the idea that the sex-role identity of the individual nurse and of the profession is traditionally feminine. Contrary to this notion, study findings indicated that nurses are largely Androgynous or Masculine in their sex-role orientation (students: Androgynous; faculty: Androgynous or Masculine; clinicians: Androgynous or Masculine).

What explains these unexpected results? Possible factors which could account for these findings include the uniqueness of the study sample, a changing sex-role identity of women in nursing and/or effects in the data analysis related to the fact that Bem's 1978 normative sample was composed entirely of college students while only 27% of the study sample were college students.

Till (1978) found that in her sample of senior level nursing students, endorsement of Feminine and Androgynous sex-role categories was 44.4% each while endorsement of the Masculine and Undifferentiated categories was 5.6% each. A comparison of her study with the present study indicates that among senior nursing students it is not the Androgynous or Masculine sex-role categories that have changed, but rather it is a decrease in the Feminine (by half) and an increase in the Undifferentiated (five times the amount) categories that have changed. A comparison of these findings does not suggest that a decrease in Feminine sex-role identity among nursing students results in an increase in endorsement of masculine characteristics (found in high amounts in Androgynous and Masculine categories). The difference lies in an increased portion of students who score low on both feminine and masculine personality traits (Undifferentiated category).

Characterizations of the "Ideal Professional Nurse"

Characterizations of the "Ideal Female Professional Nurse" by the three sample groups generally paralleled the groups' self sex-role identity, though there were some differences within each group. In the student group, 70% of the subjects characterized the "ideal nurse" as

Androgynous compared to only 45% who identified themselves as Androgynous. A possible explanation for this finding could be related to the professional nurse socialization process students received in their educational training. They may have learned didactically and through role modeling that "good" nurses have and need both masculine and feminine traits and so reported that model when asked to characterize the ideal. Tempering this argument, however, are study findings which indicate that, by count, both faculty and clinical nurses more frequently endorse the Masculine sex-role category for the ideal nurse than they endorse the Androgynous category, which curtails the amount of androgyny being role-modeled.

Over 36% of the faculty group characterized the ideal nurse as Androgynous and also identified themselves as Androgynous. However, over 13% more of this group identified the ideal as Masculine than identified themselves as Masculine with a loss of support found exclusively in the Undifferentiated self sex-role category. What remains unknown is why the faculty, as a group, view the ideal nurse as Masculine more frequently than Androgynous, especially when, as a group, they hold the reverse view of their own sex-role orientation and, in addition, probably have had

more exposure to the concept of androgyny (and as it applies to nursing) than any other group.

Like the faculty, clinical nurses view the ideal nurse as Masculine more frequently than any other sex-role category. Clinical nurses' strong leaning toward characterization of the ideal nurse as Masculine (45.16% of the group) could indicate that nurses experiencing the clinical setting-in this case, a hospital-regard it as more important that a nurse has high amounts of masculine traits (Masculine category) than high amounts of feminine traits (Feminine category) or high amounts of both masculine and feminine traits (Androgynous category). Of interest is the comparable percentages of clinical nurses who identified themselves as Masculine (41.94%) and the percentage who identified the ideal as Masculine (45.16%).

Relationship of Self Sex-Role Identity, and "Ideal" Sex-Role Identity

Cognitive dissonance theory (Festinger, 1957) assumes that an individual will attempt to establish consistency between what she/he knows or believes (e.g., a belief that the "ideal" nurse demonstrates personality traits or a particular sex-role orientation) and what she/he does (e.g., acting out the behaviors of the personality traits of one's own sex-role orientation). The theory also states

that a person may experience inconsistencies (or dissonance) in these areas which may then have the possibility of precipitating psychological discomfort. In the sample studied, slightly less than half of the total subjects (47.9%) endorsed the same sex role category for the ideal nurse as they endorsed for themselves (i.e., consistency between categories or consonance). The remainder, 52.1%, reported an inconsistency between the two categories. The breakdown within the groups is as follows:

Students

Consistent	60%
Inconsistent	40%

Faculty

Consistent	54.5%
Inconsistent	45.5%

Clinicians

Consistent	35.5%
Inconsistent	64.5%

Chi-square analysis concluded there was no significant difference between the groups on differences between self and "ideal" sex-role categories; nevertheless, a substantial percentage of nurses in each group experienced inconsistency between the two categories. From the data collected in this study, it is not known if an individual who reported

inconsistency between her own sex-role orientation and that of her image of the "ideal nurse" experienced psychological discomfort as a result, but according to cognitive dissonance theory, discomfort would exist depending on the magnitude of the dissonance (e.g., an individual who has an extremely high Feminine category rating of herself yet has a highly scored Masculine category for the ideal nurse) and the importance or value an individual placed on the elements which created the dissonance. On this basis, it can be assumed that individuals in each of the groups experience cognitive dissonance regarding their own sex-role orientation and what they think the sex-role orientation of the ideal nurse should be.

Examination of data for each group separately reveals that the nature of the dissonance between the sex-role categories lies in different areas for each group. Twenty percent of the students viewed themselves as Feminine and the "ideal" nurses as Androgynous. Both of these categories are high in endorsement of feminine traits, but while the Androgynous category is also high in masculine traits, the Feminine category is low in their endorsement. Overall then, these particular students' inconsistencies lay in describing themselves as highly feminine without high endorsement of masculine characteristics-characteristics which

they deemed essential to "ideal" functioning in a professional nurse. This finding is similar (though of a lesser percentage) to Till's (1978) finding that almost half of the senior nursing students in her study placed themselves in the Feminine category.

The nature of the greatest amount of dissonance in the faculty group was evenly split between the self-Androgynous/ideal-Masculine and self-Undifferentiated/ideal-Masculine categories. What is striking about these sets of categories is that although half of the individuals involved viewed themselves as high in both feminine and masculine traits (self-Androgynous) and the other half viewed themselves as low in both feminine and masculine traits (self-Undifferentiated) all of these individuals (27.2% of the faculty group) said that the ideal nurse should be high in masculine traits and low in feminine traits (ideal-Masculine category). For the faculty group the image of dissonance is this: There is agreement among those who are inconsistent between self and "ideal" that the "ideal" should have high masculine and low feminine traits-but the self can be high or low on both of these traits.

An examination of Table 15 shows that clinical nurses in this study had members in all but three of the possible self and "ideal" category combinations. Of the three groups

they had the greatest category-distribution of dissonance. However, the major inconsistencies were found in the self-Masculine/ideal-Androgynous and self-Androgynous/ideal-Masculine categories. Because both categories (Masculine and Androgynous) are high in masculine traits, for those who are dissonant in this group the conflict appears to be in the area of endorsing either high or low feminine traits both for the self and for the ideal.

From this discussion a singular finding emerges: For the total sample, individuals who are experiencing inconsistency between their own sex-role identities and the sex-role identity of the "ideal nurse" tend to view their own sex-role identities across all categories of sex-role and in all combinations of masculine traits (high or low) and/or feminine traits (high or low), but they regard the "ideal female professional nurse" as always high in masculine traits (Androgyny or Masculine categories) despite the level of feminine traits.

Conclusions

Based upon the results of this study, the following conclusions were drawn.

1. Female senior baccalaureate nursing students, baccalaureate nursing faculty, and baccalaureate nurse

clinicians do differ, in sex-role identity based on sex-role identity categorization, from female college students in general.

2. Nursing students and nursing faculty are more Androgynous than Feminine or Masculine in their self descriptions.

3. Clinical nurses are more Masculine than Androgynous or Feminine in their self descriptions.

4. Female senior baccalaureate students, baccalaureate nursing faculty, and baccalaureate clinical nurses differ in their characterizations of the "ideal female professional nurse", as defined by sex-role identity categorizations, from the sex-role identity of female college students in general.

5. Percentages of characterizations of the "ideal female professional nurse" differ in sex-role identity categories among senior nursing students, nursing faculty, and clinical nurses.

6. Nursing students most frequently characterize the "ideal female professional nurse" as Androgynous.

7. Nursing faculty and clinical nurses most frequently characterize the "ideal female professional nurse" as Masculine.

8. There are differences within the three groups of nursing students, nursing faculty, and clinical nurses in sex-role categories between a subject's reported self-image and her characterization of the "ideal female professional nurse".

9. For subjects who identified different sex-role categories for the self and the "ideal nurse", there is a tendency to endorse the "ideal nurse" as high in masculine traits regardless of whether the self is endorsed high or low on masculine traits and regardless of feminine ratings for either the self or the ideal.

10. There are no significant differences between groups, on differences or lack of differences, between the self and the "ideal" nurse's sex-role categories.

Implications

This study has implications for nurses in all areas of the nursing profession whether they are prospective students or graduating students about to embark on careers, educators of future nurses or practitioners of nursing in a clinical setting. It also has implications for the public in general.

The present study has demonstrated a discrepancy between the image of the nurse held by the public (Beletz,

1974) and the actual practicing nurse. Laymen need to be made more aware of the fact that nurses are not the "fluffy" stereotypes of femininity depicted by the media (Beletz, 1974; Bem, 1975) but are individuals who, as a group, incorporate high levels of masculine traits into their personalities. Within the profession, nurses need to be more cognizant of the fact that frequently, members of their profession not only view it as important for the ideal nurse to have high levels of masculine traits in the presence of low levels of feminine traits but also manifest these qualities in themselves. That is, many regard it as more important for a nurse to be masculine in her personality than to be feminine. This is most strongly supported by clinical nurses, the group which professional nurses and laymen alike most tend to regard as "the real nurses".

For nurse educators, salient implications include the fact that student nurses may need to have a more positive image of a masculine sex-role orientation presented to them, or at least to develop the masculine traits already in their possession. Implicit here is the issue that nurse educators themselves may need to cultivate masculine traits if they are to be effective role-models for students. If possession of masculine traits is indeed as important as this study indicates, means for acquiring them must be made available to

students, faculty, and clinicians alike. Possibilities include role-modeling, role-playing, assertiveness-training, and such self-sufficiency experiences as Outward Bound.[3]

A final implication of the study concerns the frequent amounts of inconsistency (and thus the psychological discomfort of dissonance) between a nurse's self identity, as defined by sex-role orientation, and the identity with which she endows the ideal nurse. This finding was particularly common for clinical nurses. With the current severe nursing shortage and the high burnout and dropout rates among nurses (Shubin, 1978), it becomes important to consider all trouble spots in nursing, potential or actualized. Though the Women's Movement has made inroads in dispelling old myths and stereotypes of femininity and in opening doors to new alternatives, much work remains. The burden of professional growth and development falls on nursing itself. Nurses need to become more aware of discrepencies in their beliefs, specifically as they regard the practice and profession of nursing. Nursing can provide the vehicle for this awareness

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[3]Outward Bound is an International Survival Training School which has a philosophy of fostering independence, decision-making, and self-confidence through group experiences in wilderness areas of the world. There are approximately 7 such school in the United States. There are no age limitations for participation.

through such measures as alloted time in the curriculum for discussion of such topics by students and faculty and similar time through in-service programs for clinical nurses.

Recommendations

The recommendations resulting from the study were to:

1. Investigate further the sex-role identity within and between groups of nurses. Samples should be selected both from the same types of institutions as represented in this study and differing institutions such as different practice settings for clinical nurses.

2. Further investigate the characterization of the "ideal professional nurse" as defined by sex-role category by tapping the opinions of such groups as the general public, graduate nurses, physicians, and other health care workers.

3. Randomize future investigation samples in order to enhance generalizability and, if chi-square statistical analyses are used, increase the sample size thus avoiding low cell frequencies.

4. In the analysis of data in the future, use as a norm of comparison for the "ideal" sex-role identity the sample's self sex-role identity and thus avoid the questionable meaning of comparing nurses' "ideal nurse" sex-role

categories to a normative sample of 1978 Stanford college students.

5. Re-analyze the data from the present study to determine the magnitude of cognitive dissonance in those individuals who reported inconsistencies between their own sex-role category and the category in which they characterized the "ideal nurse". This could be accomplished by examining and subjecting to analysis the Masculinity and Femininity scores of the categories involved.

6. Investigate the suggestion of cognitive dissonance theory that inconsistency creates "psychological discomfort" (Festinger, 1957) by examining the relationship between inconsistency and discomfort in those individuals in a sample who have reported an inconsistency between their own sex-role category and the category in which they characterize the "ideal nurse".

7. Conduct a longitudinal study of the relationship of nurses' sex-role identities and characterizations of the "ideal nurse" according to sex-role category, from nursing student status through several years of a professional nursing career in order to determine if differences between groups are the result of change or if they are the result of pre-existing idiosyncratic group differences.

APPENDIX A

WRITTEN EXPLANATION OF THE STUDY

Dear Participant,

I, Finlay Bailor, am a graduate nursing student at Texas Woman's University. As part of my Master's Program I am conducting a study of nurses' attitudes of selected personality characteristics as they apply to themselves and to their image of the ideal female professional nurse.

Your participation in the study will be greatly appreciated. The study will take approximately twenty minutes and involves filling out a data sheet and answering a questionnaire. Individual identities are not important to the study and your name or other identifying factors will not be collected.

All completed forms are to be placed in the provided unmarked envelope and sealed. Participation is voluntary. You are in no way obligated to participate and you are free to withdraw at any time. If you choose to participate, it is essential that you complete all the items to insure proper data analysis.

If you have any questions regarding the study, please contact me at:

115 Sherman Drive
Denton, Texas 76201
817/382-5882

Thank you very much for your time and consideration.

Sincerely,

Finlay Grier Bailor, R.N.

Dr. Anne Gudmundsen
Advisor

COVER LETTER TO FACULTY

January 25, 1982

Dear Faculty Member:

Enclosed you will find an explanation of a study I am conducting for my master's thesis at Texas Woman's University. A data collection form is included.

If you choose to participate, would you kindly return the questionnaire and demographic data sheet sealed in the provided envelope to by .

I very much hope that you will consider participation in this study. It will be greatly appreciated.

Thank you.

Sincerely,

Finlay Grier Bailor, R.N.

Dr. Anne Gudmundsen (Advisor)

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Ms. Finlay Grier Bailor
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Date November 24, 1981

APPENDIX B

DEMOGRAPHIC DATA SHEET

PLEASE DO NOT SIGN YOUR NAME OR INDICATE YOUR IDENTITY IN ANY OTHER MANNER.

Please complete all of the following:

Age:
Sex: (circle one) Male Female
Race:
Marital status (circle one): Single Married Divorced Separated
Number of children:
Highest level of education: (circle one)
- Senior baccalaureate student
- Bachelor
- Master's
- Doctorate
- Other (please specify)

Year graduated from nursing school:
Area of practice:
Present job title:
Number of years have held present job title:
Employment status: (circle one) Fulltime Parttime
Length of time at this institution:
Length of time practicing professional nursing: (circle one)
- less than six months
- 6 months to 1 year
- 1 to 5 years
- 5 to 10 years
- more than 10 years

QUESTIONNAIRE DIRECTIONS

This is a two-part questionnaire. Below you will find listed two sets of personality characteristics. In one section you will be asked to use the characteristics to describe yourself, that is, to indicate on a scale from 1 to 7 how true of you each of the characteristics is. In the other section, you will be asked to use the characteristics to describe your view of the "ideal female professional nurse", that is, to indicate on a scale from 1 to 7 how important you believe each of the characteristics to be of the "ideal female professional nurse".

PLEASE FILL OUT ALL FORMS IN THE ORDER PRESENTED.

Example: Irresponsible

Write a 1 if it is never or almost never true (or important)
Write a 2 if it is usually not true (or important)
Write a 3 if it is sometimes but infrequently true (or important)
Write a 4 if it is occasionally true (or important)
Write a 5 if it is often true (or important)
Write a 6 if it is usually true (or important)
Write a 7 if it is always or almost always true (or important)

Thus, if you feel it is sometimes but infrequently true that you are "irresponsible" (or important that the "ideal female professional nurse" be "irresponsible") and never or almost never true that you are "carefree" (or important that the "ideal female professional nurse" be "carefree") then you would rate these characteristics as follows:

Irresponsible	3
Carefree	1

"SELF" PERSONALITY CHARACTERISTICS*

1	2	3	4	5	6	7
Never or Almost never true	Usually not true	Sometimes but infrequently true	Occasionally true	Often true	Usually true	Always or almost always true

Please indicate on a scale of 1 to 7 how true of YOU each of the following characteristics is. PLEASE DO NOT LEAVE ANY CHARACTERISTIC UNMARKED.

Defend my own belief		Have leadership abilities	
Affectionate		Eager to soothe hurt feelings	
Conscientious		Secretive	
Independent		Willing to take risks	
Sympathetic		Warm	
Moody		Adaptable	
Assertive		Dominant	
Sensitive to need of others		Tender	
Reliable		Conceited	
Strong personality		Willing to take a stand	
Understanding		Love children	
Jealous		Tactful	
Forceful		Aggressive	
Compassionate		Gentle	
Truthful		Conventional	

	a	b	class	
R.S.				
S.S.				
			a-b	ss diff.

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"IDEAL NURSE" PERSONALITY CHARACTERISTICS*

1	2	3	4	5	6	7
Never or Almost never important	Usually not important	Sometimes but infrequently important	Occasionally important	Often important	Usually important	Always or almost always important

Please indicate on a scale of 1 to 7 how important you believe each of these characteristics to be of the "ideal female professional nurse". PLEASE DO NOT LEAVE ANY CHARACTERISTIC UNMARKED.

Defend my own belief		Have leadership abilities	
Affectionate		Eager to soothe hurt feelings	
Conscientious		Secretive	
Independent		Willing to take risks	
Sympathetic		Warm	
Moody		Adaptable	
Assertive		Dominant	
Sensitive to need of others		Tender	
Reliable		Conceited	
Strong personality		Willing to take a stand	
Understanding		Love children	
Jealous		Tactful	
Forceful		Aggressive	
Compassionate		Gentle	
Truthful		Conventional	

	a	b	class	
R.S.				
S.S.				
			a-b	ss diff.

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REFERENCES

REFERENCES

Adler, A. Understanding human nature. New York: Greenberg, 1927.

Austin, R. Sex and gender in the future of nursing. Nursing Times, 1977, 113-119.

Bakan, D. The duality of human existence, Chicago: Rand-McNally, 1966.

Bandura, A. Social learning theory of identificatory process. In D. A. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand-McNally, 1969.

Baucom, D. H. & Danker-Brown, P. Influence of sex roles on the development of learned helplessness. Journal of Consulting and Clinical Psychology, 1979, 47(5), 928-936.

Beletz, E. E. Is nursing's public image up to date? Nursing Outlook, 1974, 22, 82-90.

Bem, S. L. The measurement of psychological androgyny. Journal of Personality and Clinical Psychology, 1974, 42, 155-162.

Bem, S. L. Sex role adaptability: One consequence of psychological androgyny. Journal of Personality and Social Psychology, 1975, 31(4), 634-643.

Bem, S. L. Androgyny vs the tight little lives of fluffy women and chesty men. Psychology Today, 1976, 59-62.

Bem, S. L. The theory and measurement of androgyny: A reply to the Pedhazur-Tetenbaum and Locksley-Colten critiques. Journal of Personality and Social Psychology, 1979, 37, 1045-1054.

Bem, S. L. Bem sex role inventory: Professional manual. Palo Alto: Consulting Psychologists Press, Inc., 1981.

Bem, S. L., & Lenney, E. Sex typing and the avoidance of cross-sex behavior. Journal of Personality and Social Psychology, 1976, 33, 48-54.

Bem, S. L., Martyna, W., & Watson, C. Sex typing and androgyny: Further explorations of the expressive domain. Journal of Personality and Social Psychology, 1976, 34, 1016-1023.

Berzins, J. I., Welling, M. A., & Wetter, R. E. A new measure of psychological androgyny based on the personality research form. Journal of Consulting and Clinical Psychology, 1978, 46, 126-138.

Broverman, I., Vogel, S., Boverman, D., Clarkson, F., & Rosenkrantz, P. Sex-role stereotypes: A current appraisal. Journal of Social Issues, 1972, 28, 59-78.

Brown, R. G., Swift, V. B., & Oberman, M. L. Images of nursing: A replication. Nursing Research, 1974, 23, 53-59.

Bullough, B., & Bullough, V. L. Sex discrimination in health care. Nursing Outlook, 1975, 23, 40-45.

Butler, P. E. Self-assertion: Key to new roles. AORN Journal, 1978, 23, 215-218.

Cardwell, J. D. Social psychology. Philadelphia: F. A. Davis Company, 1971.

Carsrud, A. L., & Carsrud, K. B. The relationship of sex-role and levels of defensiveness to self-reports of fear and anxiety. Journal of Clinical Psychology, 1979, 35(3), 573-575.

Christy, T. Liberation movement: Impact on nursing. AORN Journal, 1972, 15, 67-85.

Cleland, V. Sex discrimination: Nursing's most pervasive problem. American Journal of Nursing, 1971, 1542-1547.

Constantinople, A. Masculinity-femininity: An exception to famous dictum? Psychological Bulletin, 1973, 80, 389-407.

Cowden, P. Dissatisfaction and the changing meaning and purpose of the nurse's work. Nursing Forum, 1978, 17(2), 203-209.

Cox, S. Female psychology: The emerging self. New York: St. Martin's Press, Inc., 1976.

Creel, H. G. Chinese thought from Confucius to Mao Tse-tung. New York: Mentor Books, 1953.

Cristall, L., & Dean, R. S. Relationship of sex-role stereotypes and self-actualization. Psychological Reports, 1976, 39, 842.

Dachelet, C. Z. Nursing's bid for increased status. Nursing Forum, 1978, 17(1), 18-45.

Davis, F., & Olesen, V. Baccalaureate students' images of nursing. Nursing Research, 1964, 13(1), 8-15.

Davis, F., & Olesen, V. The career outlook of professionally educated women: The case of collegiate student nurses. Psychiatry, 1965, 28, 334-345.

Dean, P. G. Toward androgyny. Image, 1978, 10(1), 10-14.

Erdwins, C., Small, A., & Gross, R. The relationship of sex-role to self-concept. Journal of Clinical Psychology, 1980, 36(1), 111-115.

Festinger, L. A theory of cognitive dissonance. Stanford, California: Stanford University Press, 1957.

Fisher, M. Distribution of women students by major fields. Unpublished paper, Office of Student Affairs, University of South Florida, 1974.

Frank, E. D. Images of nursing among college freshmen women in New Orleans. Unpublished doctoral dissertation, Columbia University, 1969.

Freud, S. An outline of psychoanalysis. New York: Norton, 1940.

Freund, J. E. Modern elementary statistics. Englewood Cliffs, J. J.: Prentice-Hall, Inc., 1979.

Gough, H. G., & Heilbrun, A. B. Manual for the adjective check list and the need scales for the ACL. Palo Alto: Consulting Psychologists Press, 1965.

Grissum, M. How you can become a risk-taker and a role-breaker. Nursing '76, 1976, 89-98.

Harris, T. L., & Schwab, R. Personality characteristics of androgynous and sex-typed females. Journal of Personality Assessment, 1979, 43, 6.

Heatherington, E. M. A developmental study of the effects of sex of the dominant parent on sex-role preference, identification and imitation in children. Journal of Personality and Social Psychology, 1965, 2, 188-194.

Heide, W. S. Nursing and women's liberation--a parallel. American Journal of Nursing, 1973, 824-827.

Heilbrun, A. B. Measurement of masculine and feminine sex role identities as independent dimensions. Journal of Consulting and Clinical Psychology, 1976, 44, 183-190.

Helson, R. The changing image of the career woman. Journal of Social Issues, 1972, 28(2), 33-46.

Herman, S. J. Becoming assertive: A guide for nurses. New York: Van Nostrand, 1978.

Hite, R. W. New radicalism in nursing: Prelude to an irrepressible conflict. American Journal of Nursing, 1977, 14-16.

Holt, J. R. The struggles inside nursing's body politic. Nursing Forum, 1976, 15(4), 325-341.

Horney, K. New ways in psychoanalysis. New York: Norton, 1939.

Hutchens, C. M. Looking ahead: Women and nursing. Imprint, 1980, 74-81.

Jones, W. H., Chernovetz, M. E., & Hannson, R. O. The enigma of androgyny: Differential implications for males and females? Journal of Consulting and Clinical Psychology, 1978, 46(2), 298-313.

Jung, C. G. Two essays on analytical psychology. New York; Meridian Books, 1956.

Keller, M. C. The effect of sexual stereotyping on the development of nursing theory. American Journal of Nursing, 1979, 1585-1586.

Kelly, J. A., O'Brien, C. G., Hosford, R., & Kinsinger, E. Sex roles as social skills: A behavioral analysis of "masculinity" and "femininity" and "psychological androgyny". Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, New York, December 1976.

Kelly, J. A., & Worell, J. New formulations of sex roles and androgyny: A critical review. Journal of Consulting and Clinical Psychology, 1977, 45(6), 1101-1115.

Kelly, J. A., & Worell, J. Parent behaviors related to masculine, feminine and androgynous sex role orientations. Journal of Consulting and Clinical Psychology, 1979, 44(5), 843-851.

Kjervik, D. K. Women, nursing, leadership. Image, 1979, 11(2), 34-36.

Kohlberg, L. A. A cognitive-development analysis of children's sex-role concepts and attitudes. In E. E. Maccoby (Ed.), The development of sex differences. Stanford, California: Stanford University Press, 1966.

Lamb, K. T. Freedom for our sisters, freedom for ourselves: Nursing confronts social change. Nursing Forum, 1976, 12(4), 329-353.

Levinson, R. Sexism in medicine. American Journal of Nursing, 1976, 426-431.

Lipman-Blumen, J. How ideology shapes women's lives. Scientific American, 1972, 226, 34-42.

Looft, W. R. Sex differences in the expression of vocational aspirations by elementary school children. Developmental Psychology, 1971, 5, 366.

Maccoby, E. E., & Jacklin, C. N. The psychology of sex differences. Stanford, California: Stanford University Press, 1974.

Mischel, W. Sex typing and socialization. In P. H. Mussen (Ed.), Carmichael's manual of child psychology. New York: Wiley, 1970.

Moore, D. S., Decker, S. D., & Dowd, M. W. Baccalaureate nursing students' identification with the women's movement. Nursing Research, 1978, 27(5), 291-295.

Muhlenkamp, A. F., & Parson, J. L. Characteristics of nurses: An overview of recent research published in a nursing research periodical. Journal of Vocational Behavior, 1972, 2, 261-273.

Nevill, D. D. Sex roles and personality correlates. Human Relations, 1977, 30(8), 751-759.

Orlofsky, J. L. Sex role orientation, identity formation and self-esteem in college men and women. Sex Roles, 1977, 3, 561-575.

Orlofsky, J. L. Sex-role orientation. In R. H. Woody (Ed.), Encyclopedia of clinical assessment (Vol. II). San Francisco: Jossey-Bass Publishers, 1980, 656-672.

Orlofsky, J. L., & Windle, M. T. Sex role orientation, behavioral adaptability and personal adjustment. Sex Roles, 1978, 4, 801-811.

Parsons, T., & Bales, R. F. Family socialization and interaction process. New York: Free Press, 1955.

Pedhazur, E. J., & Tetenbaum, T. J. Bem Sex Role Inventory: A theoretical and methodological critique. Journal of Personality and Social Psychology, 1979, 37(6), 996-1016.

Polit, D. F., & Hungler, B. P. Nursing research: Principles and methods. Philadelphia: J. B. Lippincott Company, 1978.

Roberts, J. T., & Group, T. M. The women's movement and nursing. Nursing Forum, 1973, 12(3), 303-323.

Rogers, J. A. Struggling out of the feminine pluperfect. American Journal of Nursing, 1975, 75, 1655-1659.

Rossi, A. S. Equality between the sexes: An immodest proposal. In R. J. Lifton (Ed.), The women in America. Boston: Houghton-Mifflin, 1965.

Sargent, A. G. The androgynous manager. Supervisor Nurse, 1975, 23-30.

Sears, R. R., Rau, L., & Alpert, R. Identification and childrearing. Stanford, California: Stanford University Press, 1965.

Shubin, S. Burnout: The professional hazard you face in nursing. Nursing '78, 1978, 8(7), 22-27.

Spence, J. T., Helmreich, R., & Stapp, J. Ratings of self and peers on sex-role attributes and their relations to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 1975, 32, 29-39.

Starr, D. S. Poor baby: The nurse and feminism. The Canadian Nurse, 1974, 20-23.

Strauss, A. The structure and ideology of American nursing: An interpretation. In F. Davis (Ed.), The nursing profession--five sociological essays. New York: John Wiley and Sons, 1966, 60-108.

Stromborg, M. F. Relationship of sex-role identity to occupational image of female nursing students. Nursing Research, 1976, 25(5), 363-369)

Thompson, C. Cultural pressures in the psychology of women (1942). In M. R. Green (Ed.), Interpersonal psychoanalysis: The selected papers of Clara Thompson. New York: Basic Books, 1964.

Till, G. S. Relationship of sex role identity to vocational image of female baccalaureate students. Unpublished master's thesis, Texas Woman's University, 1978.

Till, G. S. Sex-role identity and image of nursing of females at two levels of baccalaureate nursing education. Nursing Research, 1980, 29(5), 295-298.

Troll, L. E., Neugarten, B. L., & Kraines, R. J. Similarities in values and other personality characteristics in college students and their parents. Merrill-Palmer Quarterly, 1969, 15, 323-336.

Vance, C. N. Women leaders: Modern day heroines or societal deviants? Image, 1979, 11(2), 37-41.

Wakefield, J. A., Jr., Sasek, J., Friedman, A. F., & Bowden, J. D. Androgyny and other measures of masculinity-femininity. Journal of Consulting and Clinical Psychology, 1976, 44, 766-770.

Walkup, H., & Abbot, R. D. Cross-validation of item selection on the Bem Sex-Role Inventory. Applied Psychological Movement, 1978, 2, 63-71.

Wetter, R. E. Levels of self-esteem associated with four sex-role categories. In R. Bednar (Chair), Sex-Roles: Masculine, feminine, androgynous or none of the above? Symposium presented at the meeting of the American Psychological Association, Chicago, August 1975.

Wiggins, J. S., & Holzmuller, A. Psychological androgyny and interpersonal behavior. Journal of Consulting and Clinical Psychology, 1978, 46, 40-52.

Williams, J. H. Psychology of women: Behavior in a biosocial context. New York: W. W. Norton and Company, Inc., 1977.

Wilson, V. An analysis of femininity in nursing. American Behavioral Scientist, 1971, 15, 213-220.

Wolf, C. Liberation movement: Impact on nursing. AORN Journal, 1972, 15, 67-85.

Yeaworth, R. C. Women and nurses: Evolving roles. Occupational Health Nursing, 1976, 7-9.

Ziegler, S. M. Androgyny in nursing: Nursing role expectation, satisfaction, academic achievement and self-actualization in male and female students. Unpublished doctoral dissertation, University of Texas at Austin, 1977.

Zimbardo, P., & Ebbeson, E. B. Influencing attitudes and changing behavior. Reading, Massachusetts: Addison-Wesley Publishing Company, 1969.