Construing Social Dimensions of Personality Development: Nurses as Educators

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Abstract

A convenience sample of twenty registered nurses was recruited from two general hospitals and two community college nursing schools. Kelly's (1955) Personal Construct Theory provided the theoretical framework to discover how nurses perceived themselves as educators. The nurses completed a self-administered Self-Perception Inventory (Soares, 1983) to determine their perception of self as nurse and ideal self as nurse. In an interview, each of the nurses constructed a rank-order repertory grid adapted from Kelly's (1955) Role Repertory Construct Test. Twelve constructs derived from the Self-Perception Inventory (Soares, 1983) were ranked according to a list of ten elements common to a teaching situation. Rank order correlations among the constructs were determined with Spearman's rho.

Using a dependent samples t-test, significant differences were found between perceptions of current and ideal self for staff nurses. Significant differences were also found between nurse educators' perceptions of self and ideal self as nurse. No significant differences were determined in perceptions of self as nurse and ideal self as nurse between the staff nurse and nurse educator groups with an independent samples t-test. However, observations of single constructs revealed that although several constructs are shared between the groups in

the perception of self in a teaching situation, both groups hold constructs that operate exclusively in their separate domains. The nature and strength of the relationships between the common and unique constructs are different for each group.

Nurses' self-perceptions appear to be influenced by the historical development of nursing, role socialization during nursing education, social expectations and gender issues in the health care system.

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CHAPTER ONE: THE PROBLEM

Introduction

This study intends to examine nurses' perceptions of themselves as educators and whether the dichotomy of self as nurse and self as educator can be clearly defined or if they are even separate entities. The study will investigate how nurses construe or personally make sense of their worlds as teachers and care givers and to examine what events in their lives and careers may lead to those interpretations.

Statement of the Problem

Health teaching has been identified as an essential component of patient care since the early 1900's (Redman, 1993). Formal instruction in teaching-learning theory was included in the curricula of nursing schools in the United States from 1950 (Redman, 1993). Educating the patient, ". . . to prevent, to promote, to maintain, or to modify a number of health related behaviors" is a goal for which both the nurse and the patient assume responsibility (Redman, 1993, p.5). Nurses play an important role as care givers when they share health maintenance and disease prevention education with their clients, students and colleagues.

In the Standards of Nursing Practice, the College of

Nurses of Ontario (1990) mandates that "nursing is a preventive, educational, restorative and supportive health-related service provided in a caring manner, for the purpose of enhancing a person's life..." (p. 8). Education is considered by the College of Nurses of Ontario to be one of the four interacting dimensions of nursing; the others being research, management and practice.

Compliance with prescribed treatment was almost always a goal of health education. Now compliance as an end is being shunned in favour of emancipating the patient with enough information to make their own decisions regarding the life-style that is best for that individual (Landry, 1989).

Reihl and Roy (1980) as cited in Fleming (1992, p.159), and Clarke (1991) describe nurses as becoming more and more supportive of the medical model, (i.e., simply being a technician who translates what the physician will be doing to the patient), "with the result that nursing knowledge is becoming secondary and generally unspoken". They believe the implications are that nurses are then regarded as lacking the intelligence and the motivation and therefore the power to develop, implement and evaluate their own programmes. The reasons for nurses adopting this role include, too large a patient load and therefore too little time to help the patient interpret the meaning of her illness, and patients requesting health information directly from physicians as opposed to

requesting it from nurses (Landry, 1989).

Milde and Heim (1991) in a review of related health education literature, found that nurses do not perceive themselves as adequately prepared to provide health education. Pohl in Redman (1976) discovered that 37.2% of nurses indicated that they provided direct nursing care to patients but did not teach. Although many nurses believe that health education is important and that their clients are lacking health education, teaching is often completely absent (Redman, 1976).

Patients identify nurses as health educators twice as often as physicians, even though 90% of nurses believe that there is not enough time to educate patients and only 25% of nurses believe patients have been adequately taught before discharge (Redman, 1993).

The problem, therefore, is that although nurses believe health teaching is an important and crucial part of their patient care, and although nursing educators pass on this belief in their mandate to educate student nurses as competent practitioners, nurses may feel unprepared or unable to teach for a myriad of reasons. This study will examine nurses' perceptions of themselves as teachers.

Questions to be Answered

Within the context of how nurses construe themselves as

educators the following questions arise: (1) Is there a difference between nurses' current and ideal perceptions of themselves as nurses? (2) How do the self-perceptions of staff nurses differ from the self-perceptions of nurse educators? (3) Is there a difference in how staff nurses and nurse educators construe themselves as educators? (4) Can factors influencing nurses' perceptions of themselves as educators be identified? (5) Are the roles of staff nurse and nurse educator overlapping or mutually exclusive roles?

Definition of Terms

A construct as defined by Kelly (1963) is a personal interpretation of reality. An individual uses this interpretation of reality to make sense of his or her world. By determining similarities and differences among these interpretations or constructs, an individual has a choice as to which alternative represented at each end of the dichotomy will be chosen to extend the predictive range of his or her system. The dichotomy guides individual behavior by allowing the person to determine extensions or definitions of his or her construct system allowing anticipation of future events. In choosing to extend or to define (or both) one's assumptions, the individual increases the range of convenience of his or her construct system, giving more personal meaning to existence. In a society, many interpretations of reality are shared, allowing the members of that society to have a

common understanding of what represents reality.

A concept is usually an abstraction, a word to which meaning has been attached through formal or common use (Diers, 1979). A construct then, is a collection of these meanings or concepts but the words are often used synonymously.

Elements are things or events that are representative of a construct, or which are abstracted by a construct (Kelly, 1963, p.137). They may be situations known to be related to a behaviour or attitude but they must represent the area of construing, (i.e., within the range of convenience of the constructs being applied in the synthesis of a repertory grid Fransella & Bannister, 1977). Fransella and Bannister (1977) maintain that the representativeness of the sample of elements can be assured by directly questioning the subject involved as to their appropriateness.

A rank-order repertory grid is an extension of Kelly's (1955) Role Construct Repertory Test which Kelly used in psycho-therapy to elicit constructs from an individual (Fransella & Bannister, 1977). In the Role Construct Repertory Test, the individual makes a list of names according to descriptions provided by Kelly. For instance, the first name corresponds to the self. The second name corresponds to mother (stepmother), third to father (stepfather), fourth to brother nearest own age or a male friend who was close during adolescence, and so on through various relatives including

spouse. Others are included such as neighbour, clergyman, physician, teacher, employer, most successful person, happiest person. Kelly (1955, p.270) lists 22 different figures. The individual is then asked to determine for all 22 figures, how two are similar and different from a third. The description of this similarity is used as the construct, the opposite as the contrast. Two of the people on the list may be similar because they do not have strong religious beliefs; the contrast of this would be ascribing to very religious beliefs. Two may be accepting, the other rejecting; two calm, the other, nervous. In this manner, constructs and their contrasts are elicited to gain insight into how that person views the world particularly with respect to certain elements or situations.

The bipolar aspect of constructs means that when we affirm one end of the pole, we simultaneously deny the other end. Inherent in this contrast is the usefulness of the construct (Fransella, 1977). This gives us insight into what elements of a role or situation are important to a person. As one end of the construct is elicited, the other end can be interpreted or clarified by the examiner. If knowledge is perceived as an important attribute for a nurse to possess, then lack of knowledge, or ignorance, or mistaken knowledge may be the other end of the pole. It should be stressed that it is important to validate meanings and interpretations with

the subject in order to have a clear understanding of their perceptions.

The rank-order repertory grid is adapted from this technique. Fransella and Bannister (1977) describe the basic task of the subject, "to rank in order those elements most readily subsumed under the emergent pole of the construct to those most readily subsumed under the contrast pole" (p. 30). The rank-order repertory grid was used in this study for ease of administration and scoring and will be further elaborated on in Chapter 3.

A nurse in this study is a person holding a current Ontario Certificate of Competence to practice nursing who is employed in a general hospital, community health agency, diploma nursing programme or baccalaureate nursing programme. The study includes staff nurses and nurses who are teachers of nurses. Educational background assumes preparation in an institution recognized by the College of Nurses of Ontario. The study excludes nurses not currently employed in nursing because of the possible confounding effects of the reasons that they are not employed in nursing - (i.e., recently dismissed, "burned-out", pursuing other employment, furthering their education in nursing or another occupation, not presently practicing nursing, or interested in practicing but unable to find a job). This study does not deny that they are still nurses, but prefers to include only those actively

involved in a nursing role with recent experience to reflect upon. This is the population from which the sample will be drawn.

A nurse educator or teacher of nurses is a registered nurse who teaches student nurses in a community college or university. The term includes nurses who design and teach nursing inservice programmes for nurses or other health care personnel within the hospital.

Assumptions and Limitations of the Study

Use of reflective techniques may be influenced by culture, values and assumptions and by past experiences and intervening events and their impact on the personal interpretation of past events (Brookfield, 1991). The study intends to capture nurses' perceptions now and to discover which events in their lives may influence these perceptions. Kelly (1963) himself admits that it is not possible for a person to express the entirety of a construct system - that expression is often incomplete and unconscious. Therefore, the "snapshots" of constructs are interpreted by remembering that they may be more readily influenced by recent events in the subjects' lives and may evolve into something different in the future. However, valid constructs with successful predictive ability tend to be somewhat stable and are what Kelly refers to as "guiding principles" (Kelly, 1963, p. 65).

The political state of health care in general and nursing in particular, may have an influence on the nurses' perceptions of the value of their work as educators. Presently, staffing shortages in hospitals are widespread in the Metropolitan Toronto area. The amount of education that takes place is often a direct reflection of the philosophy of the individual nurse as well as the unit administrator. If education is not valued, it is unlikely in the environment of a busy hospital ward that much time will be spent assessing educational needs, let alone teaching.

A portion of the sample consists of nurses employed in teaching hospitals in the Metropolitan Toronto area. This may have an impact on how these nurses see themselves as educators and may be very different from the self-perceptions of nurses working in small communities in non-teaching hospitals. There also may be differences in the perceptions of the nurses who teach student nurses at either the community college level or at the university level. The fact that part of the sample also hails from the Metropolitan Toronto area is recognized as possibly different from those who teach in smaller communities. The sample is small and because of the convenience sampling technique cannot be generalized to the population of nurses who teach. A larger random sample would accomplish this. However, because of the highly individual

interpretation of constructs, this study may lose value in an attempt to generalize the findings beyond the sample studied. The personal interpretive views of the nurses involved are intended to represent their backgrounds and self-perceptions. These views are interpreted considering their socialization, cultural background and traditions, education, experience and values. Although constructs and perceptions may be shared with others because of common cultural links (Leonard, 1989), one cannot assume that the entire population of nurses perceive themselves this way. To generalize personal meaning to the entire population may trivialize and decontextualize the nurses' self-perceptions. A different methodology which elicits elements and constructs and/or makes use of ethnographic observation and interviewing techniques may explain how nurses construct knowledge about themselves.

The sample is exclusively female and the findings may not apply to male nurses although Christman (1991) proposes that male nurses are subject to the same socializing influences as female nurses. Hare-Mustin and Marecek (1992) agree that a person can learn any behaviour under any circumstances and that the behaviour will continue with positive feedback. However, the experience of learning for men and women and their life review and career experiences may be interpreted differently (Baines et al, 1991; Briskin, 1990; Gilligan, 1982; Hare-Mustin and Marecek, 1992; Weiler, 1988).

The investigator has had extensive experience with

interviewing technique. The investigator claims no previous experience with personal construct theory and rank-order repertory grid technique. For basic familiarity though the rank order repertory grid technique was practiced with colleagues who agreed to be interviewed in this manner and to provide constructive criticism regarding the interpretation and application of the constructs elicited. The investigator intends to bring a fresh perspective to the use of the rank-order repertory grid technique in understanding nurses' perceptions of themselves as educators.

Rationale for the Study

According to Redman (1976), teaching both chronically and acutely ill patients in hospital demonstrates improved adherence to treatment regimens and follow-up, higher levels of functioning, reduced readmissions, earlier discharge and reduced analgesic use post-operatively. More recent literature however, has found that health teaching in the tradition of the medical model increases dependence on the medical profession and institutions (Fleming, 1992) and does not necessarily increase compliance with prescribed treatments (Clarke, 1991; Landry, 1989). Good health teaching appears to include: a nurse-patient partnership where the nurse relinquishes the power position as the traditional knowledge source, an assessment of what the patient wants to know,

information and support in coping with lifestyle changes individualized to the patient, her family and her unique situation, returning control to the patient through education, and increasing awareness of realistic alternatives in health care (Clarke, 1991; Fleming, 1992; Schor & Rodin, 1982; Tilley, 1987).

Nursing education prepares nurses to enter the health care field as competent practitioners. Health education is one of the important functions these practicing nurses fulfill. Milde and Heim (1991) documented that health education content was difficult to identify in baccalaureate curricula and that no research was found regarding student or faculty perceptions of students' preparedness to carry out this function. Their review of relevant literature determined that in colleges of nursing in the United States, 22% of schools had content related to health education but sequencing of learning was absent. Schools that did incorporate health care teaching as a role of the nurse focused on content as opposed to process.

Although 80% of students believe they are competent at graduation to provide health teaching, health care administrators perceive them as needing further supervision (Cassells, Redman, & Jackson, 1986a, 1986b, in Milde and Heim, 1991). In fact, the researchers found that administrators' expectations were at the level at which new graduates were functioning - it was the perceptions and expectations that

were incongruent. This has major implications in how nurses perceive themselves as educators. If administration believes nurses are functioning at a lower level of competence than they actually are, new graduates will continue to feel undervalued and insecure in their role as educator. If some faculty place little or no value on the process of health teaching in undergraduate curriculum, students will place little value on their socialization as health educator. Perhaps the reason that nurse educators undervalue the process as opposed to the content of patient teaching is that they themselves have been through similar socialization processes wherein how patients were educated as well as what they were taught has had little worth in the eyes of administration.

Infante (1986) stresses that nurse educators require a change in knowledge, behavior, skills and values in order to teach students how to become nurses. It is not enough to show someone how to nurse and watch them repeat the performance just as it is not enough to add the role of educator to that of nurse. The process of becoming a nurse educator requires socialization into the role through learning, discussing, analyzing, testing, and reenacting with others already in and others learning the role (Infante, 1986). Nurses' perceptions of themselves as educators are enhanced by role modelling and mentoring by veteran nurse educators. The potential for conflict between self as educator and self as nurse can be

mitigated by proper preparation in the role of educator.

Theoretical Framework

George Kelly's theory of personal constructs forms the theoretical framework for this study. Kelly's theory was chosen because the investigator believes that the theory offers a unique opportunity to discover how nurses think about themselves as nurses and as educators. Kelly developed the theory for use in the teaching and practice of clinical psychology.

Personal Construct Theory

Kelly's theory stresses the rational, cognitive aspect of a person's behaviour. Self is represented through constructs which are personal patterns or templates used to understand and predict the world. People are scientists according to Kelly's theory; they test their own experience of reality every day in order to anticipate events successfully. Constructs range from simple to complex systems of perception and are revised and assimilated over time. This helps to order and organize the world and gives a measure of control over the environment. Without constructs, one's thinking would be chaotic; without the temporal nature of constructs there would be no way to form expectations about the future, and present and past events would be meaningless. The

validity of a construct depends on its predictive efficiency - the more successfully predictive a construct is, the more likely it is to be retained for future use (Hjelle & Ziegler, 1976).

Constructs are bipolar or dichotomous according to Kelly. The dichotomy is formed when a person looks at a triad of people, things, events and so on, and determines how two of the things are alike and therefore different from the third. These similarities and differences form the construct or similarity pole and the opposing contrast pole of a construct. Although Kelly believed that one is really only knowable to oneself, by examining how a person develops and interprets the similarities and contrasts, one can infer how they construe their world right now.

Fundamental Postulate

Kelly strives to make his theory provocative and fertile rather than "logic-tight" (Kelly, 1963, p.46). The assumption underlying his theory, the "Fundamental Postulate" as he terms it is: "a person's processes are psychologically channelized by the ways in which he anticipates events" (Kelly, 1955, p.46). Here, he posits the notion that how a person thinks and views the world today will rarely be the same as how it was viewed yesterday or how it will be viewed tomorrow. He believes that people are future oriented rather than

preoccupied with the past as Freud and others were. One's interpretation of reality is situational and changes as one anticipates future events and reorders perceptions of the world. How a person predicts future events determines that person's behaviour, however, one is not just the sum of one's behaviours. A person interacts with and is a product of her environment, is her own agent in life and may choose the unique interpretation of reality that best serves her needs. In Kelly's theory, subjectiveness is a welcome and necessary aspect of personal construct formation; objectiveness helps others to glimpse an alternative view of the world.

Constructive Alternativism

Constructive alternativism is the notion that however you construe something, there is an alternative way to construe it. Any interpretation of the universe is subject to revision or replacement (Kelly, 1955). One can deconstruct or reconstruct one's perceptions to illuminate weak versus useful constructs. Alternative behaviours can be constructed depending on the amount of anxiety or dissonance generated by having what were thought to be stable and predictive constructs shaken up. The awareness of the source of anxiety and the ability to develop new constructs or reorganize existing constructs depends on how tightly the constructs are

held, i.e. how permeable or impermeable to internal or external influence.

Corollaries

Eleven corollaries support the fundamental postulate (Kelly 1955, pp.50-104).

1) Construction Corollary: A person anticipates events by construing their replications.

2) Individuality Corollary: Persons differ from each other in their construction of events.

3) Organization Corollary: Each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs.

4) Dichotomy Corollary: A person's construction system is composed of a finite number of dichotomous constructs.

5) Choice Corollary: A person chooses for himself that alternative in a dichotomized construct through which he anticipates the greater possibility for extension and definition of his system.

6) Range Corollary: A construct is convenient for the anticipation of a finite range of events only.

7) Experience Corollary: A person's construction system varies as he successively construes the replications of events.

8) Modulation Corollary: The variation in a person's

construction system is limited by the permeability of the constructs within whose ranges of convenience the variants lie.

9) Fragmentation Corollary: A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other.

10) Commonality Corollary: To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person.

11) Sociality Corollary: To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person.

Range of Convenience

Range of convenience of a construct is the expanse of situations or elements to which a construct is applied. Within the construct "good-bad", meals at home may only fall under "good" while meals in a fast food restaurant may fall under "bad" depending on a person's experience with both. The elements are similar in that they both concern meals, however they are also mutually exclusive because of their location (and presumably their preparation). Meals in a fast food restaurant may not fall under the "good" construct unless the

person's construct system is sufficiently flexible or permeable to entertain that possibility. Each approaches the other in degree of "goodness" or "badness" and the range may be expanded to include meals at a friend's or relative's home, meals in an expensive restaurant, or airline meals. The construct "good-bad" may also be applied to moods, books, moral situations, decision-making or other situations, but may be totally irrelevant to crayons, friends, or politics for that individual.

The point within the range of convenience where a construct is maximally useful in interpreting events is called the focus of convenience. The good-bad construct may have its focus for one person in deciding where to have a meal; for another the focus of the same construct may be a deciding factor in whether to praise or punish one's child. The focus of convenience is individually determined when engaging the construct.

Kelly believed that people are rational as opposed to irrational. They must be viewed holistically as agents and products of their environments, not simply as the product of their psychological processes. His theory appears to allow for cultural, temporal and gender-specific interpretations of reality. It does not appear to be dependent on education or intelligence level although understanding the instructions for the rank-order repertory grid requires the ability to read,

prioritize and sort according to the importance of the elements specified. Simple or elaborate construct systems may be developed depending on the individual and unless they are rigidly impermeable, can be expanded and revised when challenged or no longer useful. This concept sustains an element of hope for the adaptability and evolution of personal constructs.

Importance of the study

Health teaching as a function of nursing practice is, and will continue to be, important in the care of patients. Most often the nurse is the only health professional the patient will have extensive contact with in the health care system. Nurses by virtue of their extensive knowledge of health and disease, the individual and the family, and the influence of the environment on all, are in an unequalled position for the delivery of health education. Yet some nurses perceive themselves as not well prepared or unprepared to offer education to their patients. This study will determine what nurses' perceptions of themselves as teachers are and what may influence this. If personal, social, educational, administrative, economic, political, or environmental factors influence nurses' perceptions of themselves as teachers, then those factors and possible solutions to the problem must be communicated to all areas of the nursing profession.

Summary of Chapter One

Chapter one includes an introduction to the question of how nurses construe themselves as educators and a statement of the problem. It contains a definition of the terms construct, element, rank-order repertory grid, and nurse. Assumptions and limitations of the study are briefly outlined. The rationale for the study includes an overview of literature pertaining to health teaching and nurse education and indicates that although nurses believe that health teaching is a necessary and important part of their role as nurses, many believe they are ill-prepared to carry it out or do not achieve it at all. Kelly's personal construct theory is described as the theoretical framework for this study.

Remainder of the Study

Chapter two consists of a literature review of the history of nursing and the impact of social forces on its development, particularly the conceptualization of gender as it relates to nursing. Previous applications of Kelly's personal construct theory in nursing research and nursing education will be described as it relates to the development of self-perceptions and role socialization.

Chapter three discusses the methodology of the descriptive, correlational, non-experimental research design. Research design, selection of subjects, instrumentation, data

collection and recording are described. A discussion of data processing, statistical analysis, assumptions and limitations follows. Chapter four consists of a presentation of the research findings and a discussion of the findings as they relate to the original questions. It includes tables and charts.

A summary of everything presented in the first three chapters and the research findings of chapter four will form the basis for a discussion of the findings and how they relate to those four chapters. This chapter will include implications of the findings, conclusions, recommendations for further research and additional issues for consideration.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

A History of North American Nursing

The education of nurses as healers began before Florence Nightingale established the Nightingale Training School for Nurses at St. Thomas' Hospital in 1860 and appears to have been first undertaken in Canada and the United States by religious nursing orders from France; in Canada (Quebec) in 1639 and in the United States by the Sisters of Charity around 1800 (Baines, Evans and Neysmith, 1991; Achterberg, 1990). Nurses of religious orders were trained to minister to the sick with the intention of saving their souls more often than saving their bodies, but the healing contributions of the men and women who ran these nursing orders before the Reformation was considerable (Achterberg, 1990). The role of men in nursing after this time until recently, appears to have been non-existent. Once support from Catholic and Protestant orders diminished however, hospitals that had once been havens for the sick became wretched, stinking, infested hovels run by the only people who would stoop to perform "nursing" duties - women who were prostitutes and drunkards (Achterberg, 1990).

Although Nightingale worked arduously and successfully to elevate the status of nursing while decreasing the mortality rate of soldiers during her 1854 commission by the British government to a military hospital in Turkey, she viewed

nursing as a "calling" rather than a profession, and declared it to be as natural a part of being a woman as "mothering" (Achterberg, 1990). Claiming hard work, a quest for perfection and unquestioning obedience to authority as desirable qualities in a nurse, Nightingale at the same time elevated the practice of nursing from its unclean depths while perpetuating the idea that women were subordinate and best suited to a position in which they could be caring and nurturing, loyal and obedient (Achterberg, 1990; Baines et al., 1991). The curing role (and often credit for the caring as well) was accorded to men (Achterberg, 1990; Baines et al., 1992; Gordon, 1993). Colliere (1986) claims there was often confusion throughout the history of medicine with regard to whose role care and cure belonged. She states that the practice of medicine was originated and spread around the world by women (by word of mouth) and was appropriated by monks and then the medical profession as men learned to write. Women lost control of their history as men recorded what they wished to know and prohibited women from learning to write thereby acquiring power through control of knowledge.

Nursing in the mid-1800s and early 1900s served as a safe and respectable occupation for daughters of the middle and upper classes where their caring and nurturing replicated "women's work" in the home. Achterberg (1990) points out that the upper echelons of nursing were quickly filled by these

educated women who then recruited mostly lower-class, minimally educated women to do the "hands on" work. In the hospital setting, nursing duties consisted mainly of applying poultices and giving medication in strict compliance with physician's orders. This regimentation and strictly enforced adherence to institutional policy dictated by the powerful male-dominated medical profession limited the independent, creative and assertive role of not only the nurse but the rarely found female physician as well.

Before the turn of the century, the United States boasted three nursing schools in New York, Boston and New Haven all modelled in practice and belief after the Nightingale School at St. Thomas' Hospital in London. Here, a woman was trained not just for an occupation but for a way of life that embodied:

> Moral development, proper behaviour, loyalty, order and discipline, and hierarchical control by a nursing matron who considered the hospital a home....nursing sought to create a culture that would enhance the competence and autonomy of women....others have argued that it was the place where "women learned to be girls". (Baines et al., 1991, p.49)

Hospitals, even into the 1930s, were usually staffed by

student nurses who were the lowest in a line of female authority dictated to and controlled by the medical establishment. (Graduate nurses went on to private duty nursing in a patient's home, as the patient's private employee in the hospital or as a physician's helper.) This large population of conscientious, dedicated, largely unpaid student workers kept mortality rates low and hospitals operating (Achterberg, 1990). The educational needs of these nurses were usually subordinate to the needs of the hospital and led to large educational gaps (Reverby, 1987).

Nursing education, then, reproduced the prevailing social attitudes and ensured the status quo of women's work (i.e., caring, altruistic sacrifice, nurturing, support, submission), as separate from men's work (i.e., scientific enquiry, economic and social control, decision-making). The feminization of nursing reflected the shaping forces of the socio-political climate in which nursing developed. It implied a duty to care as opposed to an ethic of caring within which nurses would have been able to make autonomous judgements about patient care (Baines et al., 1991). Nurses rarely made independent judgements; they obeyed doctors and hospital administrators and were only as knowledegable as they needed to be - or were allowed to be. Patient education was viewed as a medical function; nurses did not assume this responsibility until the advent of the visiting nurse (Redman,

1993). As such, nursing provided an acceptable social outlet for women who yearned for something constructive to do with their lives. Reverby (1987) explains that nurses of this time could take pride in their learned skills and their care of the sick and dying and the fact that they really were contributing to the common good. She claims that nurses were professionalizing altruism at the expense of autonomy.

Nursing schools proliferated at the turn of and early into the twentieth century but remained disease oriented (Redman, 1993). Baines et al. (1991) explain that the status of nursing as a career advanced in Canada during the 1918 influenza epidemic. In the United States, nurses formed their own professional organizations, the National League of Nursing Education, and another group that would become the American Nurses Association (Achterberg, 1990). Nursing reformers, keen to change the social, educational and economic status of nurses, were fervent advocates of the nurse as teacher and health promoter. Areas of public health concern targeted for action by nursing associations included: school nursing, visiting nursing, infant and industrial welfare, and social services within the hospital (Redman, 1993). It was in the area of public health, namely family planning and hygiene, that nursing had its greatest support from the suffragist movement. Other than suffragist advocacy of educational opportunities for all women, it is difficult to identify

other, specific areas of support for nurses.

Nurses and female physicians, eager to escape the traditional male-dominated model of medical care, and tired of the paternalistic treatment afforded women by male physicians, ventured on their own to tackle the public health problems associated with being poor and unable to pay for medical care. Most physicians took a dim view of nurses initiating anything on their own. Quoting the 1901 Journal of the American Medical Association, Achterberg (1990) explains that many doctors found nurses to be "often conceited and too unconscious of the due subordination she owes to the medical profession, of which she is a sort of a useful parasite" (p.162). However, when the nurse was the practitioner venturing into the slums and tenements of the city to deal with the physical, emotional and social dilemmas plaguing the immigrant and indigent populations, she displayed, according to the same article, "...bodily strength, knowledge of symptoms, the ability to deal with emergencies, and mature judgement" (Achterberg, 1990, p. 162).

Reverby (1987) claims that the transition from a "culture of obligation" (p. 8) into active opposition of the social structure and beliefs that oppressed them was next to impossible for women at the time because of a lack of both money and power. Nursing was restrained by its own beliefs and ideology and the existence of powerful social deterrents

that subscribed to the belief that women's behaviour and therefore their niche in society was solely a function of their biology. With this in mind, the leaders of nursing reform aimed their sights on change from within. Broadening the scope of nurse education with increased scientific knowledge was a logical, but difficult, place to begin.

Recognition of the nurse as a teacher and the inclusion of health teaching in nursing curricula reflected a change in attitude and thinking from treatment of disease to prevention of disease. Nightingale's tenacious belief in the moral causes of illness could not be shaken by the germ theory to which others ascribed, and was the basis for her insistence that nurses do the important job of caring and leave the curing role to doctors. Against this attitude, the leaders of nursing reform rallied. They struggled to increase the knowledge base of nursing programmes and to find ways of measuring knowledge for admission and registration standards. They maintained the impression that nurses were best suited for caring because of their gender, while striving for the rights of nurses to speak in their own best interests and for wages commensurate with their new skills and experience (Reverby, 1987).

Dissension from within the ranks of nursing was another battle the reformers fought. Many nurses viewed their occupation as the respectable, womanly thing to do. This was

a calling, not something to be taught, and nursing took on an essence of spirituality, a call to duty, for these women. Firmly linked to the female role was the duty to care; caring was what ought to be expected of the nurse. As the economic value of care declined with the explosion of technology, so did the value of nurses' (and womens') caring. The value of nurses' work lay in the performance of technical tasks and in their ability to support, and quietly advance the medical profession.

Other nurses took pride in their experience and skills and organized themselves into groups that demanded wages to match their efforts. They were part of the new wave of women who, from 1900 on, were either working out of economic necessity or just because they wanted to work. These nurses were accused of being commercial and their pleas for recognition silenced when they spoke out at public meetings or in journals (Reverby, 1987). Thus divided, nurses continued to function as young, inexpensive, disciplined labor for hospitals that continued to ignore their disunited voices. Tacitly, without nurses, these same institutions would have ceased to function.

Hospitals were the largest employers and trainers of nurses until the 1960s and 1970s when the education of nurses was largely taken over by community colleges in Canada. Baccalaureate programmes had been offered since the 1920s by

the University of British Columbia, McGill University in Montreal and the University of Toronto. Mid-century, nursing leaders called for a baccalaureate degree in science as a minimum requirement for practice, and continue to do so. This idea served to further divide the "traditionalists", who felt that this requirement devalued their work-based experience and their commitment to caring, and the "professionalists" who believed that the surest route to reform and autonomy was through education and the development of their own scientific model of nursing (Baines et al., 1991; Colliere, 1986; Reverby, 1987).

Clearly the history of nursing has had a significant influence on how the public, physicians, other health care workers perceive nurses, how nurses perceive themselves as nurses and how they translate their experience as nurses for those who are learning to be nurses. Reverby (1987) states that the technological knowledge and capabilities of nurses, and the essence of caring, does not easily translate into power, control or money. Nurses in the United States are struggling legally and politically to have caring revalued and to be able to claim rights from their caring (Reverby, 1987). In an effort to trim costs from "an overfat health system" (Risk, 1993, p.5), hospitals are acknowledging the huge expense of an illness-based model of care and reevaluating other models of delivery of health care. Consumers of health

care have a greater involvement than ever before and may need to realign their view of medical treatment as "health", with the economic realities of continuing to provide that medical treatment according to an illness-based model.

Today, hospital-based nursing largely remains a fragmented, rigidly hierarchical profession with professional organizations and trade unions often polarized on issues. A united voice would go a long way in demonstrating to the public and the medical profession just how invaluable and consequently valuable caring is. Assigning social behaviours as "male" or "female" obscures the human quality of those behaviours (Hare-Mustin & Marecek, 1990) and restricts what we can learn and what we can do. Believing that caring is as important as curing means that we believe that behaviour has no gender and that any gender can learn any behaviour (Hare-Mustin & Marecek, 1990). Our lives could only be enriched by such liberation.

Role Socialization of Nurses

Student nurses, in their socialization into the role of nurses, more often assume the characteristics of their teachers or the characteristics that their teachers expect, than the attributes of a professional nurse with whom they may have had limited contact (Conway, 1983; Kramer, 1974). Conway (1983) states that socialization is an ongoing process and that expecting a neophyte nurse to display the competencies of

an experienced nurse is unrealistic. A number of studies have researched the match between student role concepts and faculty concepts and two studies reviewed by Conway (1983) claim that the closer the match between students' and teachers' values and attitudes, the more complete or successful socialization is believed to be. The generalizability of these studies was limited as they used nurses from discrepant nursing programmes (i.e., one study from one type of programme, the other from a mix of diploma, associate degree and baccalaureate programmes), the studies had relatively small, local or regional samples and they used research tools of which only some had reported reliability and validity (Conway, 1983).

Kramer (1974) believes that the socialization process into the culture of nursing extends across and beyond the first year of practice. Unfortunately, some studies of nurse socialization emphasize the outcome of nursing education as opposed to the extended process of socialization, that is, at graduation, how congruent neophyte values and perceptions of the nurse role are with those of professionals in practice or with the perceptions of faculty (Conway, 1983).

Kramer (1974) contends that nursing school simply prepares nursing students to be nursing students. She explains that on graduation there is a "reality shock" (akin to culture shock) that occurs as a new nurse realizes that the role perceptions and values learned as a student are

incongruent with real work roles and values (p. 5). Over time, nurses who remain in nursing practice (as opposed to teaching) perceive fewer rewards from their work and are likely to drop or reduce their professional attitudes (Kramer, 1974). Teachers maintain high professional self-perceptions.

In his discussion of role socialization of nurses, Christman (1991) strongly advocates a firm education at advanced levels of technology so that nurses can better define their roles in health care and relate more effectively to other professionals in the same and related fields. This notion places the blame for poor communication squarely on the nurse and her "poor preparation" in a practice based on an illness model. It would perpetuate the role of the nurse as a technologist in an environment that defines caring as curing. It defines the nursing role in terms of the medical role; nurse as technologist, physician as healer.

Christman (1991) stresses that nurses' roles are defined by their personal knowledge of the role, role modelling they have witnessed, the strength of their knowledge base and interactions and expectations with and from others. Others perceive nurses in the context of nurses are what they do and this in turn reinforces how nurses perceive themselves. The norms for specific social settings generally dictate the behaviour in that setting. The lower the social expectations of the nurse, the less valued the nurse perceives herself to

be. When nurses have little professional preparation, then groups such as hospital administrators, other health providers, physicians and similarly prepared nurses "interact primarily and more intensely with those nurses" (Christman, 1991, p.210). An interesting point that Christman makes is that this role perception seems to be gender independent, with male nurses showing the same role behavior as female nurses because they are socialized by the same forces. This would support Hare-Mustin and Marecek's (1990) theory that behaviour has no gender, "we can expect that a person of either gender can learn virtually any behavior under circumstances appropriate for its acquisition, and the behaviour will be maintained if it continues to effectively elicit positive consequences" (p.79). Christman continues to say that because male nurses show the same lack of intellectual curiosity as their female colleagues, that the problem is not gender related but is because of incomplete socialization into the role of a professional. Perhaps the reason male nurses demonstrate this trait is more closely related to their socialization in a predominately female profession where power and authority are control devices wielded largely by male-dominated professions (Hare-Mustin and Marecek, 1990).

Arthur (1992) emphasizes that it is important for nurses to possess a professional self-concept to effectively deliver health care with a degree of equality and respect in the

health care field. The two assumptions upon which his report is based are that perceptions of the self are closely linked to perceptions of the professional self, and that there is a link between the professional self and the ideal professional self. He believes that nurse academics, clinicians and educators would do well to address the issue of the development and maintenance of professional self-concept in nursing curricula. Arthur (1992) uses the terms self-concept and self-perception synonymously and puts forward the belief that just as attitudes about others can be measured, so can attitudes about the self. In his review of the literature, Arthur discovered that during the socialization of student nurses, the students form impressions about themselves as compared to the norm for, and the diverse dimensions of, the professional role. He acknowledges that "something" happens during the socialization of student nurses but more work needs to be done to identify what that is. Arthur also identifies studies which give conflicting evidence about nurses' perceptions of themselves with one study claiming staff nurses have a high self-concept and others claiming that the self-concept of nurses is low. Other studies reveal that self-confidence and self-esteem are high at the beginning of nursing programmes and decrease with each year in the programme (Arthur, 1992). In their attempt to develop a suitable tool for the measurement of the professional self,

Dagenais and Melais as quoted by Arthur (1992), claim that no one has developed a measuring instrument that encompasses all the dimensions of the professional self.

Goffman's (1959) interpretation of the presentation of the self in everyday life includes an explanation of how one acts a role. In role interactions, one can never know everything about how others perceive one or about how they feel; one relies on the impression that others give about the past and the future, in other words, what they are and what they want. In an interaction, one depends on a multitude of inferred cues, expressions, and hints to predict the reality that is unperceiveable at the moment. The possibility of misinterpretation arises when others misrepresent themselves. For instance, a patient may have an illness wherein teaching is generally thought to be a necessary part of treatment. In the case of diabetes, where the technique of injecting insulin must be taught for the patient to maintain disease control upon discharge from hospital, the patient may appear to be interested in learning, but when she returns home, she returns to all the same social supports (or lack of support) and old habits that were never discovered in the artificiality of hospitalization.

The self is a performed character in Goffman's (1959) metaphorical use of theatrical performance as representative of the roles people play in everyday life. The individual

works to maintain an impression that others have of her and must believe in her own part to do this. Reciprocally, interactional tasks performed by the self are perceived as real and sustained by the audience in its expectations of the performer. To learn a role, one takes on or selects an already established role. Since the self in a role is a performed character, it has the capacity to learn in the task of training for the part.

Kelly (1955) thought that common expectations were manifested by cultures and that one behaved in accordance with how one thought she was expected to behave. In other words, "I am behaving this way because I know you are expecting me to behave in this way". One anticipates how one should behave by calling upon those constructs that, by experience, have worked successfully in the past. In order to be a participant in the social process of another, one must effectively construe the other's outlook rather than construe as the other person does. For example, in a professional relationship between a nurse and a patient, the nurse could not always perceive things exactly as the patient does or she would be so like the patient that she would have difficulty separating her feelings and her role from the feelings and role of the patient. Kelly claims that this amount of understanding of a patient leads to a standstill of the therapeutic process (Kelly, 1963, p.99). In the professional role, nurse and patient must have some

understanding of each other - that similarity or commonality involved in the social processes of two people, but not to the point where each must understand things in the same way as the other. Even acting in a manner contrary to the role expected assumes understanding of the other's role. One can only willfully do the opposite of something if one is aware of that which is expected.

Beane and Lipka (1984) claim that the self develops almost entirely as a result of interactions with others, significant others in particular, and that self-reflection "may be of uneven influence" (p.14). In their literature review, Beane and Lipka (1984, pp. 15-16) condense a number of processes by which the self is structured: the self organizes new experiences adding them to the structures of perception already present; memory is scanned to determine if the new information is similar to past or present perceptions; new information is screened to determine if it is enhancing or threatening to the self; new material may be biased or altered to make it fit existing structures. Based on this analysis, the self chooses whether or not to engage in or avoid new experiences; the self reflects on the utility of the new information and may be a motivating force in the search for new information for support of existing perceptions or growth; the self judges or determines the value of new structures to determine a sense of self-worth. This is not a linear process

and self-perceptions change as one accumulates experience.

Infante (1986) asserts that nurses who become educators have to acquire an entirely new set of skills, new knowledge, behaviours, values and expectations. As these role requirements are accomplished the nurse's perceptions of herself change. Her interactions with other educators can provide valuable guidance in her changing repertoire. As others see her more as educator than nurse, then she perceives herself more as educator than nurse. Problems arise according to Infante (1986) when the nurse has strong emotional ties to the role of practitioner. Failure to clarify the role of educator is sometimes because of poor discriminatory powers in the nurse. Or, problems may arise from conflict between specialist roles where the practicing nurse has great competency in an area but the educator who teaches students in a variety of areas never achieves confidence in any of them. The diversity of roles demanded of the nurse educator (e.g., researcher, community resource) means that the ultimate goal of improving the quality of patient care may seem obscure and distant. Bedside nursing provides short-term fulfillment of the caring role (Infante, 1986) for nurse educators and persists as an inaccurate definition of nursing practice (Kramer, 1974).

Both nurse educators and practitioners have educative roles in the hospital and the community. Each contributes directly and indirectly to patient care. The nurse educator is

concerned with the education of students as well as serving as a consultant to practitioners. The practicing nurse serves as a role model and resource to the student nurse. She "epitomizes the quality care that quality education professes and produces" (Infante 1986, p.96). Again, the perception of oneself as nurse or an educator partially depends on how others see you in the role. This reinforces or validates one's constructs of what the role exemplifies.

Self-perceptions of Nurses

The preceding sections illustrate how strongly culture and the cultural interpretation of gender and role socialization influence one's perception of self and ultimately one's perception of professional self.

Nurses develop their perceptions of self as nurse in nursing school and in their practice as professional nurses. Nurses who were educated in the "matron-militaristic apprenticeship type of model" (Christman, 1991, p.211) became the norm for nursing because of limited scientific input from nurses as well as stereotyped behaviour models closely linked to genderized roles for nurses and physicians. Christman explains that instead of being knowledge creators, nurses obtained knowledge by a trickle-down effect and became passively obedient and self-effacing. This was enhanced by the insulating effect of hospital schools of nursing.

Technological advancements in health care and nursing practice should cause schools to consider educating the student nurse from a "whole task" (Kramer, 1974, p.28) approach. It is necessary to educate students in broad scientific and humanistic principles rather than in specific tasks which reflect themselves in fragmented care and social perceptions of the nurse as a handmaiden. Kramer (1974) claims that the task-oriented health care system may not be ready for such well-prepared nurses, and concludes that this is part of the reason that new graduates, better educated than ever before, are not having an impact on the improvement of nursing care. When these nurses discover the incongruence between their expectations and the expectations of the workplace, they lose the ability to accurately predict their impact on others and the impact of others on them; they become "interpersonally incompetent" (Kramer, 1974, p.30).

Kelly (1955) examines the way a person interprets her world with his personal construct theory. His fundamental postulate of the psychology of personal constructs is that an individual places an interpretation on her world by mentally structuring and restructuring incoming information and stimuli in a way that is both familiar and helpful in predicting the future. One person is different from another by way of her interpretation and prediction of events. Common experiences can be shared but there will never be one who has had the very

same experiences or interpretations of experiences as another. When people behave similarly in situations because they expect the same things, there is social consensus in the "commonality" (Kelly, 1963, p.176) of their constructs. In this manner, one is construed to be in a role. A role is not contingent on others' approval or disapproval, simply their expectations.

Anticipation of future events depends greatly on how replicative certain aspects of them are. Persons choose those aspects of events that tend to replicate themselves, thereby helping them to predict the future and conserve their construct systems. When two events are perceived as the same and different from a third event, one begins to construe the world. This contrast encompasses all other aspects of events that fall between the two poles of the dichotomy. Similar events may be chosen over dissimilar events or an event that is totally different from another may be chosen to expand one's experiences. We tend to choose one path or the other in making decisions. Sometimes the safer, more familiar route is chosen (similar constructs), at other times we are more willing to take risks (dissimilar constructs).

Kelly believes that people think in terms of similarities and contrasts to expand their world. For example, the choice between safety and risk illustrates a dichotomous construct a person may choose to interpret her world. Sometimes the world must remain stable and safe, and be refined and constructs

that are similar are chosen. Other times, one's constructs need to be disturbed and extended and a contrasting construct is chosen. These choices take place over a period of time and are influenced by one's experience and cultural expectations, interaction with others, and previously successful experience predicting future events. As one ages, one becomes a product of the accumulation of one's experiences.

Kelly (1955) states that in order to make inferences about a person, one must observe, listen and attend to the other. Language constitutes a series of symbols that represent a person's constructs. When the symbols are similar in their interaction, then communication takes place, when the symbols are dissimilar, more representations need to be trotted out. When the person has been conceptualized, then further abstraction is necessary to determine which constructs are operative in guiding her behaviour. A person acts in the way they do so that they can predict and control events in their lives. They generally strive to maintain structure and internal consistency in their perceptions of the world and of themselves. Construction systems are anticipatory as opposed to reactionary as a person learns from experience and moves in a forward direction in her daily life. Constructs are perpetually tested, drawing on past experience to be applied to the present in order to structure and anticipate the future. As constructs are tested and found to be successful

or unsuccessful in anticipating the future, they are retained, revised or replaced. Although we may be, in a sense, "victims" of our perceptions, Kelly assures us that we do not have to remain victims of the past or even the present. The potential for change and hope abide in the reconstruction of our perceptions. This reassurance means that it is possible, should we desire, to reconstruct restrictive, historically persistent perceptions of gender within ourselves and eventually within our culture.

Kelly's (1955) theory of personal constructs may be applied at any age and is not age or stage dependent as are most developmental theories. These theories may fit some perceptions of development, but they are restrictive in their interpretation of normalcy and in their cross-cultural applications. The age-relatedness of the stages imposes "deadlines" on development despite the fact that their authors insist that there is an overlap between, and movement among the age boundaries of the developmental tasks. Kelly's theory claims that we construct our own interpretations of normalcy and reality. Development is an individually determined, experiential process. Although as a group we are all exposed to similar socializing influences, each person will interpret them differently and will bring that interpretation to bear on the development, revision or replacement of constructs.

Within a society there can be great inter-individual variation in the formation of constructs. There is no pressure to have completed a certain developmental task by a certain time. As the concepts of what is normal and what is real are individually and collectively defined, Kelly's theory can be applied across cultures. What better way to get to know someone, to appreciate another manner of behaving or thinking, than to "try on" someone else's constructs.

Kelly's theory does not assign gender-related tasks although gender is an issue that he does not directly address. One's perception of gender is constructed from the sum of one's learning experiences, positive or negative that they may be, and so becomes intricately tied to one's self-perception as an assumptive framework.

Hare-Mustin and Marecek (1990) assert that the real nature of male and female cannot be determined from a constructivist standpoint, only representations of gender. Male behaviour has traditionally been the benchmark of normalcy in society, and from that, notions and locations of power are defined. Genderized behaviour and attitudes have developed and are maintained as the status quo and rarely challenged (Hare-Mustin & Marecek, 1990). This restricts access to the roles and status of each gender.

The differentiation of gender occurs through language, a powerful tool that is most often wielded by those in a position of dominance. It is through the expression of power and control, most often the "male" domain in western culture, that the attributes of strength, objectiveness, analysis, leadership, dominance, and rationality are assigned to men. Women embody non-male characteristics such as: relatedness, caring, irrationality, softness, submission, and subjectiveness (Hare-Mustin & Marecek, 1990). Women in positions of power though, will display "male" or "power" attributes. Hare-Mustin and Marecek give an example of a conflict situation between a mother and child: the mother appeals to rules and orderliness, the child to sympathy and forgiveness. Even nurturing and raising children means that someone more powerful has someone more vulnerable in their care.

Kelly's personal construct theory allows men and women to claim any of the attributes as relevant to their construct systems. In claiming one attribute, the opposite is just as important in its exclusion of what one is not, providing a broader picture of what one is. Personal construct theory also allows one to identify where, on a continuum between poles, their perception is situated. A woman may be more caring with her children than she is with her best friend. A man may be caring with his children, much less caring about a

stranger. In a different situation though, he may care more about the stranger if he has just found his wallet. In Kelly's theory, the perceptions of caring, and the perceptions of gender, are individually and situationally determined.

The language of gender has been identified by Hare-Mustin and Marecek (1990) as a powerful tool used by groups in control to classify rank, and label experience and, once in place, these classifications, ranks, and labels are both enduring and confining in the amount of latitude allowed in their interpretation. The authors believe language structures one's interpretation of reality and therefore the reality of those with whom we communicate. The constructivist notion of reality then, is a personal interpretation of the shared meanings derived from language, history and culture (Hare-Mustin & Marecek, 1990).

The very word "nurse" conjures up a multitude of images. There is the popular media image, generally glamourizing life, death and nursing and not doing any of it realistically. Then there is the Nightingale "lady with the lamp" who saw nursing as an art, rather than a science and who embodied caring, tenderness, self-control, unselfishness, compassion, wisdom, empathy, imagination, obedience, sobriety, integrity and morality. A nurse may mean comfort or pain, a nurse may be the only link to the health care system or for that matter the only link with reality that a person has. A nurse may be a teacher or a student or both. Her questionable social status,

in the mixed gender milieu of the university may be sadly reflected by the "popular" statement: "if you can't get a date, get a nurse." Nurse theorists themselves differ about what nurses are and what their roles are from health promoter, to patient teacher, to patient advocate by making sure that hospitals "don't scare patients to death" (Patricia Benner as quoted by Gordon, 1993, p.79).

Leonard (1989) posits the notion that the common meanings present in language and culture are integrated by the individual in a highly personal manner, then shared with members of that culture. The cultural context that shapes the person must be considered whenever the individual is studied as it is this culture that can " . . . make the world intelligible for us, create our possibilities and the conditions for our actions" (Leonard, 1989, p.47). Personal meaning and the interpretation of events are actively constructed, and have little significance outside of their referential frameworks. The fact that one might believe that nurses must care about their patients before they can care for them lacks significance by itself. It attains meaning when interpreted in terms of a culture either valuing or not valuing the ethic of caring.

Leonard's (1989) phenomenological description of the self interacting with the environment is similar to Kelly's theory of personal constructs. Her application of phenomenology to

nursing theory and practice demonstrates the usefulness of critically scrutinizing one's knowledge of nursing. Leonard summarizes five facets of what a "person" is:

First, each of us has our own world and a world we share with others. We are shaped by the world, shape the world and can be understood as "being-in-the-world" (Leonard, 1989, p.44). In other words, we share culture, language and common experiences with all other members of the world who share these with us and who contribute to what we are. Consideration of a person's world then, helps the nurse to understand who that person is in their world and is a particularly important consideration in teaching. Teaching a patient to change a dressing aseptically may be futile if the nurse does not understand that her patient's world consists of a rooming house with limited access to soap and water and sterile equipment.

Second, people are feeling beings for whom things have significance and value and therefore the person must be considered in the context of those values and feelings. What is shameful in adult culture may be a source of pride in adolescent culture. Guilt in eastern cultures may take on different social and personal meaning than in western culture. Kelly considered anxiety to occur when a person's ability to interpret and predict events was threatened with failure. This occurs most often when impermeable constructs

are confronted with new events. Guilt occurs when there is a perceived failure in a core role; a role that is basic to the maintenance of an individual's identity (Hall, et al., 1985). However, most emotions and feelings and their effect on the development of constructs are not directly considered in Kelly's theory. The purely intellectual nature of Kelly's theory and its therapeutic applications have been criticized in this regard (Hall, et al., 1985).

Third, the person is viewed as self-interpreting in terms of linguistic and cultural traditions. Leonard (1989) cites a study by Caudill and Weinstein that demonstrated that Japanese babies were distinctly different from American babies by four months of age and claimed that they were interpreting themselves in terms of their cultural backgrounds at such an early age. (She does not explain what criteria were employed to determine the differences). Leonard explains that the American notion of upward mobility only has meaning in a culture where class lines are flexible enough to allow the opportunity for self-improvement.

Fourth, our bodies provide for the possibility of concrete extensions of our self (Leonard, 1989). There is an intricate relationship of body to mind. When the body succumbs to illness it is our understanding of ourselves that is disturbed. Leonard (1989) argues that it is the nurse who is best suited to helping the patient adapt to this change and

"reclaim a sense of embodiment that allows for taken-for-granted, unselfconscious transaction with the world" (p.48).

Fifth, the person is a being in time, a product of the past and future, a consequence of their having-been and being-expectant. Now is viewed as transitional in terms of the past and the future. Our perception of our self is determined by what has happened in the past and what we predict will happen in the future. This is similar to Kelly's theory of personal constructs when we use past events to fashion constructs which will help us to control and predict the future. Kelly (1963) claims that we are free to choose, alter and discard constructs inasmuch as we can be enslaved by our constructs and then choose to be free of them by reconstruing the world. Freedom comes from being able to predict, order and gain control over one's life. The phenomenological view of "freedom" as outlined by Leonard (1989) is one of "situated freedom" (p.44). Our choices are constrained by our language, culture, history and values. The self is constrained by the world it lives in by virtue of the influence of the world on the self and the self on the world.

Berger and Luckmann (1967) claim that a person can be aware of multiple realities and move from one to the other with a greater or lesser degree of trauma. It is the realities of everyday life that are attended to most urgently and that

are most manipulable. The reality of everyday life is shared with others and is therefore intersubjective but is never identical with that of others. Others are, though, part of one's reality and as Berger and Luckmann (1967) point out, ". . . as man externalizes himself, he constructs the world into which he externalizes himself . . . in the process . . . he projects his own meanings into reality" (p.104).

Self-perceptions are complexly related to one's history, culture, and language as well as how one is perceived by the rest of the world. The perception of the self as a nurse then, depends not only on how the history of nursing has influenced the perception of the nurse's role, but by the language that describes it, the assumptions that frame it, and by the culture that embraces it.

CHAPTER THREE: DESCRIPTION OF RESEARCH METHODOLOGY

Overview

This chapter discusses the research problem from the methodological perspective. It reviews related research, discusses the theory supporting the methodology and describes the sample, instrumentation, data collection and data processing. Methodological assumptions and limitations of the study are outlined. The problem statement from the first chapter is redefined.

Description of Research Methodology

A review of the literature has revealed a dearth of information regarding the use of Personal Construct Theory (Kelly, 1955) and the repertory grid to discover how nurses perceive themselves as educators. As both of these have been used extensively in the areas of psychology and education and to determine other characteristics of nurses such as caring, a descriptive study was designed to determine how nurses perceived themselves as educators and whether there was a difference between staff nurses' perceptions of themselves as teachers and nurse educators' perceptions of themselves as teachers.

Use of the Repertory Grid to Determine Self-Perceptions

An adaptation of Kelly's (1955) role construct repertory test is used to discover how nurses personally interpret and anticipate their experience of nurse as educator. The original role construct repertory test was used by Kelly in clinical settings to determine the development, evolution and utilization of a client's constructs. The use of Personal Construct Theory, the role construct repertory test, or the repertory grid (a structured interview with a graphic representation of an individual's perceptions) in nursing research seems to be confined to the interpretation of difficult concepts such as caring and interpersonal skills (Morrison, 1989) or the socialization of nursing trainees (Heyman et al., 1983). Personal Construct Theory and the repertory grid demonstrate ideal applications in the area of psychiatric nursing by promoting nurses' understanding of their patients' perceptions (Pollack, 1986). No literature was discovered regarding the use of repertory grids to determine nurses' perceptions of themselves as educators.

The purpose of the repertory grid is to inform us about the way a system of personal constructs evolves, and its limitations and possibilities. The focus on verbalized, easily accessible constructs may be at the expense of deeply imbedded constructs of which the person has little awareness. The repertory grid is a picture of a person's system of constructs at this instant and may not represent constructs in

operation in other situations or at other times. Repertory grids single out constructs from the complex, interactive network in which they have full meaning (Fransella, 1977) and in this aspect may be artificial in their representation of real mental processes (Heyman, et al., 1983). Fransella (1977) states that repertory grids are frequently used outside of the context of personal construct theory with success and that they are probably more sensitive than any psychological instrument in use to date (1977) in gathering personally meaningful perceptions of one's world. Mazhindu (1992) concurs but cautions that use of the repertory grid outside of the theory of personal constructs should not ignore Kelly's philosophy.

Kelly's repertory grid technique has been widely adopted as a research technique in psychology, management and education (Mazhindu, 1992) and has been used extensively in these settings to determine how a person construes the experience of everyday life as well as the experience of life over time. It is as suited to longitudinal studies as it is to cross-sectional studies, as changes in the formation of and application of constructs over time can be observed. It can reflect cycles and patterns of development in groups as well as individuals.

Kompf (1990) used Kelly's Personal Construct Theory to examine ideal constructs used by teachers to define what

teaching is. Constructs were elicited by the use of an adapted repertory grid and by the use of individual interviews. These constructs were then discussed and their derivations and applications reviewed. Some of the construed ideals of practice identified by the teachers in Kompf's study included: interpersonal attributes, ethics, personal manner, organizational factors, competence, caring, responsibility and humor. These ideals provided purpose and direction for the teachers who were part of the study and guided them in their practice of teaching. The constructs elicited were highly personal and self-reflective and as such offered great insight into self as teacher for these individuals.

Soares (1983) based the development of the Self-Perception Inventory for nurses (SPI, Appendix A) on a previously developed tool for measuring the self-perceptions of teachers. Nursing groups that included: nursing professors, RNs at a local hospital, hospital supervisors and student nurses were asked to create a trait pool or to review the traits contained in the Teacher Forms. All of the traits on the Teacher forms plus two additional traits added by the nurses (caring/disinterested and independent/dependent) were compiled to create the SPI/Nurse Forms. As the groups appear similar in their perceptions of themselves in their professional roles, it is assumed that an adapted repertory grid technique would as efficiently elicit the

self-perceptions of nurses as it would elicit the self-perceptions of teachers (Kompf, 1990).

Morrison (1991) used repertory grid technique in a qualitative study designed to explore nurses' perceptions of the often ill-defined concept of caring. Two hundred constructs were elicited from 25 British nurses and grouped into seven categories that described caring. In an earlier study, Morrison (1989) used personal construct theory and repertory grid technique to elicit eight bi-polar constructs of caring from 25 charge nurses. Morrison found discrepancies between self as carer and ideal self as carer which he did not find unusual given the demanding and difficult work that nurses perform. Significant in Morrison's observations was the personal cost of caring for the carer, a theme that is recurrent in other literature (Fransella, 1977; Gilligan, 1982; Gordon, 1991; Infante, 1986; Schmuck, 1987). It is this cost of caring and self-sacrifice that traditionally undermines the acquisition of confidence and knowledge in nurses' careers (Baines, et al., 1991). Confidence and knowledge have been identified by Milde and Heim (1991), Infante (1986), and Redman (1976 & 1993) as crucial to the way that nurses develop perceptions about themselves as teachers. Morrison's study should be interpreted cautiously however as the sample size was small and the study requires examination in the context of the larger ongoing study of which it was a part.

Sample and Population

A sample of 40 registered nurses was selected for the study by a non-probability, convenience method. The target population was registered nurses practicing as staff nurses in a general hospital and nurse educators teaching in a community college in the southern Ontario area. The study was comprised of two parts. In the first part of the study, participants completed a Self-Perception Inventory or SPI (Soares, 1983, Appendix A) which was mailed back to the investigator. The second part of the study involved a personal interview at a site of the participant's choice during which participants completed an adapted rank-order repertory grid. Seven of ten staff nurses completed the adapted rank-order repertory grid in their work setting. Three of the ten staff nurses completed the grid at home. Three of the nurse teachers completed the adapted rank-order repertory grid in their homes and the other seven completed it at their place of employment.

Study packages containing letters identifying the researcher as a Master's degree student at Brock University and explaining the intent of the study (Appendix B), consent forms for participation in the study (Appendix C), as well as the SPI were distributed to the 40 nurses through contact nurses within two hospitals and within two community colleges. These nurses were asked to distribute the study packages to nurses they knew and who were working with them

that day or within the next few days. The convenience method of sampling is commonly used in clinical nursing research (Diers, 1979) and in educational research (McMillan and Schumacher, 1989) and was chosen, despite its inherent risk of bias, to compensate for the distance of the researcher from the study site (Houston-Toronto). It was also chosen because the investigator believed that if someone known to the participants approached them and asked them to share personal information, that personally meaningful data would be disclosed with candor on both the questionnaire and during construction of the repertory grid. Kompf (1990) used a purposeful sampling technique in his study of the way teachers construed teaching after considering "depth of study, quality and quantity of interview time and the unique personal aspects of the disclosures of each teacher" (p.89). Kompf feared that much of the subtle nature of the information may have been overlooked if the sample had been larger and more generalizable. It is recognized that the generalizability of the results will be limited to the sample group.

Return of the questionnaire with the signed consent form indicated that participants were willing to take part in the study. There were responses from 20 nurses or 50% of the nurses contacted. This is consistent with questionnaire response rates of 40% to 60% identified by McMillan and

Schumacher (1989) and Polit and Hungler (1978). All of the nurses completed the study.

Informed Consent

Permission to proceed with the study was obtained from the Brock University Sub-committee on Research with Human Participants. Subjects were given two identical consents (Appendix C) to participate in the study in their study package and were instructed to mail one signed form with the completed SPI to the investigator in a postpaid addressed envelope. Participants were advised to keep the other copy of the consent for reference. To ensure anonymity of the participants, returned SPI forms were coded SN1-SN10 for staff nurses and T1-T10 for nurse educators, as they were received. Adapted rank-order repertory grid data were labelled to correspond with the SPI coding. Identifying consents were separated from the encoded data and kept separate throughout the study. Pursuant to completion of the study (i.e., communication of results to participants) identifying data will be destroyed by shredding.

Methods to safeguard participants' anonymity was explained in the Letter to Participants (Appendix B) and the Consent to Participate (Appendix C) and again upon meeting the participants for the repertory grid exercise. At the time of the repertory grid exercise meeting, subjects were reminded

that they were free to refuse to participate or to withdraw from the study at any time. They could refuse to answer any questions and could ask questions regarding the study at any time.

Instrumentation

Two methods were chosen to gather information for the study: a self-administered Self-Perception Inventory (Soares, 1983) and an adapted rank-order repertory grid administered during an interview.

Part One: The Self-Perception Inventory

Soares (1985) states that the primary purpose of the SPI is research but allows that there are other seemingly relevant uses:

(1) Describing the present affective dimension of children and adults primarily in regard to themselves and their relationships to others.

(2) Determining the perceptions of self, the picture that the individual thinks that significant others have towards the individual and the picture that others actually hold of that same individual.

(3) Comparing the degree (or lack) of congruence of self-ratings and others-ratings.

(4) Obtaining an indirect measure of needs--assessment (sic) programmes.

(5) Limited clinical identification. (p.4)

The Self-Perception Inventory/Nurses (Appendix A) was chosen because it provided 38 bipolar constructs determined by a normative group of 410 nurses (106 undergraduate nursing students in a university baccalaureate programme, 55 student nurses enrolled in a hospital R. N. programme and 249 trained nurses in urban hospitals). The test is a forced choice, semantic differential format. The test is composed of six scales measuring: self-concept, self-concept/nurse, ideal concept/nurse, reflected self/supervisors, nurse-rating scale/students and nurse-rating scale/professionals. Each test requires an average of five to twenty minutes for each form, depending upon age group and reading ability. The four tests administered were self-concept, self-concept/nurse, ideal concept/nurse, and reflected self/supervisors. These tests have a high stated test-retest reliability (at six weeks) of: self-concept .89, self-concept/nurse .94, ideal concept/nurse .92 and reflected self/supervisor .90, (Soares, 1985, p.19). Content validity for the SPI is moderate to moderately high at .52 to .72 and construct validity is moderate at .53 to .66. After reviewing the type of information garnered by each test, it was determined that two of the tests yielded information pertinent to the study of nurses' perceptions of themselves as teachers; the self-concept/nurse test and the ideal concept/nurse test. The

two unused tests, the self-concept test and the reflected self/supervisor test have been stored for future research use. Intercorrelation between self-concept/nurse and ideal concept/nurse is stated at .60.

No pretesting of the SPI was conducted with this sample as the investigator believed that the reliability and validity of the test to determine nurses' perceptions of themselves had been reasonably established by the test authors.

Part Two: The Adapted Rank-order Repertory Grid

The second part of the study consisted of the administration of an adapted rank-order repertory grid (Fransella and Bannister, 1977) to determine how the constructs operating in nurses' perceptions of themselves as nurses were related to the elements of teaching.

Kelly used the Role Construct Repertory Test clinically to determine the perceptions of individuals rather than groups as previous psychological research had done (Mazhindu, 1992). He allowed the individual to develop a personal interpretation of the relationships and events of everyday life, rather than have the therapist impose interpretations on the client's experience. In this way therapist or observer bias could be eliminated. The therapist was there to help the client identify and define her constructs and to discern the relationships between constructs and the elements of the

relationships, events or things that they were related to. The client would gain greater insight into her perceptions of herself and others. The adapted rank-order repertory grid is an extension of Kelly's Role Construct Repertory Test which was a method of deriving a mathematical description of a person's psychological functions or perceptions.

Kelly's (1955) original Role Construct Repertory Test involved the establishment of a Figure List (significant others) beginning with one's own name and working down the list to the final description. It was the representation of the person rather than the actual name that Kelly was interested in obtaining. When all of the names had been entered, clients were asked to consider successive triads of figures. They were then requested to label and then identify how two of the figures from the list were similar and thereby different from a third figure. The similarity of the figures became the emergent pole of the dichotomy; the difference in the figures became the implicit pole. In this manner the client created the construct axis of the grid.

The element axis is created from things or events which are abstracted by the constructs (Kelly, 1963). Role playing, story telling (especially effective for use with children), and writing are ways suggested by Kelly (1963) in which elements might be elicited. In psychotherapy, elements often are elicited in a psychologically protected environment.

Kelly (1955) states that the methodology of the repertory grid is flexible and that it has many applications. Behaviours, occasions, events, and things may be placed along the axes of the grid. Mazhindu (1992) and Fransella and Bannister (1977) agree that the methodology is flexible and that "the repertory grid is now a well-established diagnostic and research tool" (Mazhindu, 1992, p.605) that has many applications in psychology, education and management.

Yorke (1985) cites Cronbach and Meehl's (1955) definitions of validity when discussing the validity of the repertory grid in terms of predictive ability, concurrent validity, content validity and construct validity. He states that Kelly preferred to view concurrency in terms of the usefulness of the grid in an explanatory and predictive capacity rather than measuring it against an established test that would tell us what is already known (p. 384). Yorke states that it is difficult to assess construct validity because (in use with individuals) the sampling of elements and constructs is rarely representative of the respective population. The study of nurses' perceptions of themselves as educators will attempt to display stronger construct and content validity by using common elements identified from teaching literature (as applied to nursing) and by using the constructs supplied by the SPI that are known to be representative of a group of nurses. The representativeness

of the elements and constructs supplied was confirmed with the nurses participating in the study, in keeping with Fransella and Bannister's (1977) assertion that "there is no reason why the subject cannot be directly questioned as to the representativeness of the sample, just as he can be questioned about whether each element is properly within the range of convenience of the constructs which are being applied" (p.30)

Reliability of the Role Construct Repertory Test was discussed briefly by Kelly (1955) who preferred to discuss the consistency of the test, claiming that reliability was too narrow a term to use. He explains that use of the original form of the test with two small groups, hospital patients and college students, with a one-week interval between tests, had a reliability of .69 and .70 respectively. These groups were small and only one week had elapsed between tests so the reliabilities must be interpreted cautiously. Inherent in the aim of the test, however, is that it can illustrate either the permanence of construct systems, or the revision or abandonment of unproductive or worthless constructs over time. Reliability, in the empirical sense, may be difficult to establish.

Kelly (1955, pp.229-231) and Fransella and Bannister, (1977) outline six assumptions underlying the development of a repertory grid: (1) the constructs elicited should be

permeable, therefore applicable to people and interpersonal situations outside of those by which the constructs were elicited, (2) pre-existing constructs should be elicited indicating permanence of construct formation, (3) the verbal labels attached to the constructs should be understandable to the examiner - accuracy should be checked with the subject, (4) constructs elicited should reflect the way the subject believes others understand her, (5) the subject must locate herself somewhere along the continuum between the poles of the constructs, and (6) the constructs must be bipolar.

The rank-order form of the grid was adapted to the study of nurses' perceptions of themselves as educators. Subjects rank, in order, the elements most closely matching the emergent pole of the construct to those elements most readily subsumed under the contrast or implicit pole of the construct (Fransella & Bannister, 1977). The role title list may be abandoned as long as the elements are representative of the construct being considered (Fransella & Bannister, 1977; Kelly, 1955; Mazhindu, 1992). In this study the elements chosen were gleaned from literature pertaining to nurses teaching both patients and students. Common elements of teaching situations were identified from a number of sources (Brookfield, 1990; Brundage & MacKeracher, 1980; Cranton, 1989; Knowles, 1975; Redman, 1976 & 1993). The elements of the teaching process as applied to nursing were consistent

with the nursing process: assessment, diagnosis, planning goals, intervention and evaluation (Redman, 1993, p. 13). Whether to supply or elicit the elements is a contentious point among researchers. Yorke (1985) advocates a combination of supplying and eliciting the elements, with elicitation performed first in order to avoid contamination of the elements by the supplied elements. The elements in this study were supplied in order to assure a consistent interpretation of a teaching situation across the group of nurses for comparison. This means that the nurses were not allowed to supply their own interpretations of a teaching situation, however, all of the elements used in the study were confirmed with the subjects as being representative of a teaching situation or as being employed when reflecting on a recent teaching situation. Therefore, it is assumed that the elements were within the range of convenience of the constructs tested. The selection of elements was limited arbitrarily to ten, as the ten chosen were the most common in the literature reviewed and, as the grid generates a large amount of data, to keep the analysis of the data within manageable proportions.

The ten elements used in the adapted rank-order repertory grid in this study were [E=element]:

(E1) challenging learner beliefs,

(E2) critical reflection on own teaching practice,

(E3) being a role model,

(E4) determining learner needs,

(E5) involving learner in decision making and learning,

(E6) assessing learner motivation to learn,

(E7) supporting the learner through the learning process,

(E8) developing instructional strategy: planning objectives for learning, choosing instructional materials, sequencing instruction and selecting assessment tools

(E9) assessing outcomes of teaching,

(E10) coordinating other members of the health care team to teach.

The constructs used in the study were also supplied with similar limitations as noted for supplying elements. Yorke (1985) defends his assertion that while there may be good reasons for supplying constructs, the researcher makes massive assumptions regarding shared meaning in doing this. The constructs supplied in this study were taken from the SPI which was normed by student and practicing registered nurses. It is assumed that these constructs are representative of the larger group of nurses and again the nurses in the study were questioned as to the meaningfulness of the constructs supplied. They all agreed that the constructs were meaningful to them in considering their perceptions of themselves as teachers.

Twelve constructs were chosen from the completed SPI by a group of five nurses for application to the adapted rank-order repertory grid. The investigator had originally decided to ask the nurses to chose ten constructs out of the 38 supplied by the SPI to curb the amount of data generated. The 12 chosen were the result of a group process that determined that no fewer than 12 constructs could be used to adequately describe their perceptions of themselves as nurses. The five nurses choosing the constructs were staff nurses. The chosen constructs were considered by a nurse educator who determined that they were generally representative of nurse educators' experiences of teaching students.

The 12 constructs (and their contrasting pole) as chosen and presented as part of a teaching experience were [C=construct]:

(C1) situation where you were accepting (rejecting),

(C2) situation where you were articulate (inarticulate),

(C3) situation where you were competent (incompetent),

(C4) situation where you were courteous (sarcastic),

(C5) situation where you were creative (imitative),

(C6) situation where you were enthusiastic (indifferent),

(C7) situation where you were flexible (rigid),

(C8) situation where you felt informed (uninformed),

(C9) situation where you were organized (unorganized),

(C10) situation where you felt respect (disparaging),

(C11) situation where you were stimulating (dull),

(C12) situation where you were able to be caring (disinterested).

Pilot Study

Although no literature was found where the repertory grid technique was applied directly to nurses' perceptions of themselves as teachers, the repertory grid technique as well as the rank-order repertory grid have had many applications in psychology, business and education (Fransella and Bannister, 1977; Mazhindu, 1992). Repertory grids have had limited use in nursing by Heyman et al. (1983) and Morrison (1989) to determine nurses' perceptions of themselves. The investigator has had extensive interviewing experience but experience with the repertory grid was limited to graduate school classroom exercises. Three staff nurses volunteered to work through a model of the repertory grid with the investigator in order that any problems might be discovered and corrected before the data collection began. The wording of the instructions for completion of the grid was modified to make the instructions less ambiguous at the suggestion of the nurses. This was the only modification required. It took the nurses 20 to 30 minutes to work through the grids.

Data Collection and Recording

In the first part of the study, data were collected by means of a demographic questionnaire (Appendix E), and a self-administered Self-Perception Inventory/Nurses (Soares, 1983, Appendix A). Packages of test/scoring forms were ordered from Soares Associates, Measurement Specialists, 111 Teeter Rock Road, Trumball, CT 06611, U.S.A.. Four out of six parts of the SPI/Nurses, self-concept, self-concept/nurse, ideal concept/nurse and reflected-self/supervisor, were ordered and sent in the study packages to the participants in June 1992. The nurses were requested in the Letter to Participants (Appendix B) to complete the forms and return them in the stamped, addressed envelope provided by July 20, 1992. The letter emphasized that there were no right or wrong answers, that it was the nurses' interpretations and beliefs that mattered and that it would take approximately 45 to 60 minutes to complete the SPI. In the forced-choice semantic differential type SPI, the nurses were instructed to place only one check in one of the four spaces on the line between the words presented. They were encouraged by the directions on the test to work as quickly as possible since their first answer was likely to be the most accurate answer. The instructions on the test again emphasized that there were no right or wrong answers, only answers that represented the nurses perceptions of themselves. Eighteen of the replies

were received by July 20, 1992 with two other replies coming in August, 1992. They were all included in the study.

In the second part of the study, appointments were made by telephone for completion of the adapted rank-order repertory grid. The nurses were asked to choose a time and location that was most convenient and most comfortable for them. It was hoped that the most thoughtful information would be gathered under these circumstances. At the time of the interview, the nurses were reminded that they were free to withdraw from the study at any time, free to refuse to answer any questions, and free to ask any questions they might have regarding the study. Seven of ten staff nurses and seven of ten nurse educators completed the grid exercise in their work setting. Three participants in each group chose to complete the grid in their homes.

Participants were presented with a series of ten, four-by-six inch cards, each card containing a statement pertaining to an element of a teaching situation. They were allowed to peruse these briefly if they wished. Then, the first three-by-two inch card containing one of twelve construct cards was presented. Instructions were as follows:

> I would like to ask you to complete the second part of the study now. This is called a repertory grid exercise. A repertory grid is a type of graph that helps to

determine how you perceive yourself in certain teaching situations as compared to the constructs, or interpretations of yourself as a nurse that you supplied on the self-perception inventory that you mailed back to me. This has been used by a number of professionals, particularly in psychology and education, but has been used very infrequently with nurses. It seems to be a very effective tool for gathering personally meaningful interpretations of a person's world. I will supply you with a set of teaching element cards and a set of construct cards. Please consider both sets of cards carefully. Then, lay out the element cards from top to bottom, number one to number ten, in a column. For the first construct card presented, choose the teaching element that best fits that construct. For example, the construct "articulate" may be best matched by the element "challenging learner beliefs". Set that element aside. Choose the next best teaching element that describes the construct "articulate" and then set that one aside. Continue in this manner until you finish matching the construct "articulate" with the teaching element that least matches that construct. For example, the construct "articulate" may be least matched by the teaching element "coordinating other members of the health care team to

teach". Please repeat this until all of the elements have been ranked on the construct supplied. I will record your answers as you make your decisions. There is no time limit to this, but your first answer is likely your best answer.

Please feel free to ask me any questions you may have at any time. Thank you for taking the time to be a part of this study. I will send a copy of the findings to you as soon as the study is complete.

As the participants worked their way through the choices, the investigator recorded the rank order of the elements as ranked on the constructs under consideration, in pencil on a four-by-six inch index card. Each index card had been pre-coded SN1 to SN10 or T1 to T10 to correspond with the SPI and demographic information previously supplied by the subject. The answers were recorded in pencil as the subjects were allowed, but not encouraged, to change their minds about an answer. Answers were changed very infrequently. Upon completion, the exercise yielded a ten element by twelve construct rank-order matrix. An example of a rank-order repertory grid is seen in Appendix D.

Data collection was identical for each of the subjects. It is not known how long it took each participant to complete the SPI on their own. Completion of the repertory grid took from 20 minutes to two hours.

Analysis of the Data

Demographic data for staff nurses and nurse teachers was totalled and displayed in Appendix F.

Preliminary analysis of the SPI data required converting the checks placed in the choice boxes on the SPI answer sheets to numerical form to obtain raw scores for each item. This was scored according to the directions provided by the test authors (Soares, 1985). A "very positive" position on the answer scale was scored as +2, a "more positive" position was scored as +1, a "more negative" position was scored -1, and a "very negative" position was scored as -2. The algebraic sums yielded an index score for each measure.

Once an index score was determined for each subject, further analysis could take place.

First, index scores for the entire group of nurses (n=20) were related to the norm by comparing the scores to stanines. This method of standardization was outlined by Soares (1985, p. 20) in the test manual. The expected scores were compared to the observed scores for the self-concept/nurse inventory and the ideal concept/nurse inventory by a Chi-square "goodness of fit" test.

Next, the total discrepancy in the index scores of the staff nurses as a group and the teachers as a group was determined by examining the difference of the indices for

self-concept/nurse and ideal concept/nurse. Mean discrepancies were determined within and between each group of nurses for the self-concept/nurse inventory and the ideal concept/nurse inventory. The means of the groups were compared using a t-test for dependent and independent samples to reveal any significant differences within and between the two groups respectively, in their current perceptions of themselves as nurses and their ideal self-perception as nurses.

Rank-order correlations were determined between the constructs, upon which the elements had been ranked in the adapted rank-order repertory grids, using Spearman's rank-order correlation computation. The correlation scores (all had positive values) were totalled for all of the nurses within each of the groups and then divided by 10 to give the total mean correlation for each construct. Relationship scores for each construct were calculated by squaring the correlation coefficient (yielding the coefficient of determination) and multiplying by 100 to remove the decimal point (Fransella & Bannister, 1977). The highest score for each group of nurses was determined and indicated the construct most closely related to all of the others. The next highest score was calculated by totalling the remaining scores, exclusive of the highest related construct score. The entire group of constructs was treated in this manner until the list was exhausted. This generated a list of constructs

for each group which indicated the strength of the relationship of each construct to all of the other constructs in staff nurses' and nurse educators' perceptions of themselves as nurses, as measured by constructs C1 through C12, in a teaching situation defined by elements E1 through E10.

The data were processed and tabulated on an IBM compatible personal computer, except the demographic data and scoring of the SPI, which were tabulated by hand.

Methodological Assumptions

There are several methodological assumptions present in this study of nurses' perceptions of themselves as educators:

(1) People make sense of their experiences in the world through a system of constructs that operate to order perceptions and predict events. These constructs guide individual behaviour and provide frameworks through which behaviour is determined. Personally defined systems of constructs determine reality for the individual whether or not this reality is shared by others (Kelly, 1955).

(2) Perceptions of self or situations are bipolar and the individual can orient herself somewhere on a continuum between the poles.

(3) Perceptions can be determined and quantified for analysis by use of the repertory grid technique.

(4) The 12 constructs used in the adapted rank-order repertory grid exercise that were derived from the Self-Perception Inventory/Nurses are representative of nurses' self-perceptions.

(5) The ten elements of teaching supplied in the study and derived from nursing literature pertaining to teaching, are representative of a teaching situation.

(6) Education is an essential role for the nurse as it prevents or alleviates illness and maintains and promotes health. Education of students in the science and art of nursing prepares for this role.

(7) Measuring the self-perceptions of staff nurses and nurse educators is useful and important for enlightenment of these and possibly other groups.

(8) Nurses' perceptions of the self as a nurse and as an educator begin during the role socialization process of nursing education and are perpetually influenced by historical, cultural, environmental, social and political forces.

Limitations of the Study

The following limitations are acknowledged in this study:

(1) The sample size is small [n=20] and the convenience sampling technique limits generalization of the results to other than the study participants.

(2) Although the effect of the presence of the investigator seems to be eliminated in collection of data on the SPI by allowing the participants to complete the questionnaires on their own, one wonders if the picture of self as nurse now and ideal self is accurate or perhaps an over or under estimation of one's perceptions in an attempt to provide the investigator with information that the participants thought was important. The presence of the investigator may have influenced responses on the adapted rank-order repertory grid, however, participants were encouraged to work as quickly as they could to provide their first responses which Soares (1985) claims are usually the most accurate.

(3) Both elements and constructs were provided by the investigator. This is not an ideal situation as it forces subjects to consider their experiences in terms of the constructs provided. It may miss other constructs operating in the realm of that person's experience. Participants were allowed space in which to provide their own constructs at the end of the SPI but few constructs were elicited.

(4) The constructs used and construed as meaningful may reflect permanence in the construct systems of the nurses who supplied them. This may mean that more subtle constructs in operation in different teaching situations or over time are not available for examination, and that they might not be in the subject's awareness or easily retrieved.

(5) Postmodern feminist literature indicates that it may be difficult for women to interpret themselves and their experiences on a bipolar continuum (Hare-Mustin & Marecek, 1991). Furthermore, the separation of constructs into poles denies the complex nature of human experience and may not give a full picture of perceptions in a given situation. This study only claims to represent the nurses' interpretation of their perceptions of themselves as nurses and as teachers at the time the data were collected.

Restatement of the Problem

The problem in this study, as defined in chapter one, is an identified incongruency in nurses' perceptions of what they should do in their practice of nursing (i.e., teach) and what they actually do. The literature illustrates this, stating that although nurses believe health education is an important nursing role, many nurses do not teach or believe they are not well-prepared to teach. Several questions arise from this apparent discrepancy in role perception:

(1) Is there a difference between nurses' current perceptions of themselves as nurses and their perceptions of an ideal nurse as measured by the SPI?

(2) How do the self-perceptions of staff nurses differ from the self-perceptions of nurse educators as measured by the SPI?

(3) Is there a difference in how staff nurses and nurse educators construe themselves as educators as determined by the adapted rank-order repertory grid?

(4) Can factors influencing nurses' perceptions of themselves as educators be identified from the SPI or the adapted rank-order repertory grid?

(5) Are the roles of nurse and educator overlapping or mutually exclusive roles?

Summary of Chapter Three

Chapter three is an outline of the methods and methodology employed to analyze and describe nurses' perceptions of themselves as educators.

Chapter three described the role of Kelly's (1955) Personal Construct Theory in determining nurses' perceptions of themselves as educators. It discussed the purpose of and use of the original Role Construct Repertory Grid and some current applications of the repertory grid in education and nursing. A description of the convenience sampling technique and the reasons for choosing the technique were provided. Informed consent was considered. The instrumentation, the SPI and the adapted rank-order repertory grid, and the data collection were described in detail. The methods of processing and analyzing the data were described. Eight methodological asssumptions and five limitations inherent in

the study design and methodology were identified. The problem and the research questions were restated in operational form.

CHAPTER FOUR: PRESENTATION OF THE FINDINGS

Characteristics of the Sample

Demographic data were collected with a questionnaire (see Appendix E) distributed in the study package. The results presented are profiled in Appendix F.

All 20 of the nurses were female. Ten of the twenty nurses were registered nurses employed as staff nurses; eight of the ten were employed in the obstetrics and gynecology unit of a large Toronto hospital and two of the ten were nurses in the Intensive Care Unit of a smaller community hospital.

Of the ten nurse educators, one nurse was responsible for nursing/medical inservice in a community hospital, eight of the ten taught at community colleges and one nurse identified herself as a teacher at a university teaching hospital and a teaching member of a university faculty. Three of the eight community college staff also said that they also taught at university teaching hospitals. This may be an effect of clinical teaching assignments in university teaching hospital sites or of employment outside of a regular teaching position.

Ages of staff nurses ranged from 28-46 years with a mean age of 37.2 years. Ages of nine of the nurse educators ranged from 28-48 years with a mean age of 39.7 years. One nurse in the nurse educator group did not include her age in the demographic data.

The number of years of practice for staff nurses ranged from 6-25 years with a mean of 15.7 years. The questionnaire did not ask if all the years of practice were in one or more positions or in one or more types of nursing practice. The number of years of practice for nurse educators ranged from 3 to 28 years with a mean of 16.2 years. Again, the questionnaire did not query as to whether all of those years had been in education or not.

One hundred percent of the nurse educators stated that they were employed in education, ninety percent of them employed full-time and ten percent of them employed part-time. None of the staff nurses considered their employment to be in education. One hundred percent of the staff nurses were employed in a specialty area (intensive care, obstetrics/gynecology and reproductive biology), eighty percent of them full-time and twenty percent of them part-time. Thirty percent of the nurse educators considered their practice to fall within a specialty area (psychiatry, intensive care and neurosurgery). None of the staff nurses held management positions; two of the ten nurse educators were employed at the management level. Three staff nurses had been employed prior to nursing as, a waitress, a florist and in a laboratory. Four of the educators had been previously employed as, a stress management counselor, in radio and sales, as an education coordinator and as a bank manager.

Fifty percent of the staff nurses were educated in hospital based schools of nursing while none of the nurse educators were. One staff nurse had received her basic education at the community college level and one of the hospital educated nurses had likewise gone on to complete a community college nursing programme. Forty percent of the staff nurses had baccalaureate preparation in nursing and seventy percent of the educators had similar basic education in nursing. Two community college educated nurse teachers had obtained baccalaureate degrees in nursing; one in a basic programme and the other in a post-basic baccalaureate programme in nursing. One nurse educator had a bachelor of arts degree.

Seventy percent of the educators had completed graduate school and obtained master's degrees. Six of these were in education and one in arts. Neither the staff nurses nor the nurse educators had completed any graduate studies in nursing. None of the staff nurses had any graduate education.

Questions 28 through 36 dealt with the issue of learning to teach and whether or not participants' basic nursing programmes seemed to value teaching. Eighty percent of the staff nurses claimed that they had not learned about teaching outside of their basic nursing programme. Two of the nurses had learned about teaching, one at Dalhousie University and the other while she was employed by the public health

department. Of the staff nurses, forty percent did not believe that their basic nursing programme valued teaching while sixty percent believed that their programme did value teaching. Two staff nurses claimed that their programmes stressed the content of teaching over the process of teaching, three staff nurses believed their programmes stressed the process of teaching more than the content of teaching and three believed there was an even split between content and process. Two staff nurses did not furnish any answers for the content/process questions.

In questions 28 through 36, one hundred percent of the nurse educators had learned about teaching outside of their basic nursing programme. The colleges and universities cited were: Humber College, Sheridan College, Niagara College, Ontario Institute for Studies in Education, York University, Brock University, University of Windsor, Central Michigan University, Michigan State University, D'Youville College in Buffalo, New York and the University of Manila in the Philippines. Only one nurse educator believed that her basic programme did not value teaching; nine out of ten believed that their programmes did. Twenty percent of the nurse educators stated that their nursing programmes stressed the content of teaching over the process of teaching, forty percent said their programme stressed the process of teaching over the content of teaching, and thirty percent believed

there was an even split in the emphasis between content and process. One nurse educator did not answer questions 34, 35, and 36.

When asked who they taught in their work setting, one hundred percent of staff nurses taught patients. They also taught students (60%), peers (60%), and others (40%). None of the staff nurses stated that they "did not teach". Eighty percent of nurse educators taught patients. They also taught students (90%), peers (70%), and others (20%). None of the nurse educators stated that they "did not teach".

The Self-Perception Inventory

Comparison of Index Scores to Standardized Equivalents

Raw scores were obtained and totalled as described for each participant on each inventory to yield individual index scores.

Index scores were compared to the standardized equivalents [stanines] determined by Soares (1985, p.20) when the test was developed. The stanine groups were combined because of the small size of the sample. Therefore, it was expected that stanines 1 to 3 contained 23% of the sample, stanines 4 to 6 contained 54% of the sample, and stanines 7 to 9 contained 23% of the sample. For a sample of n=20, it was expected that stanines 1 to 3 would contain 4.6 (23%) nurses, stanines 4 to 6 would contain 10.8 (54%) nurses, and stanines

7 to 9 would contain 4.6 (23%) nurses. Observed counts for the sc/n inventory were: stanines 1 to 3 - 0 nurses, stanines 4 to 6 - 2 (10%) nurses and stanines 7 to 9 - 18 (90%) nurses. Observed counts for the ic/n inventory were: stanines 1 to 3 - 0 nurses, stanines 4 to 6 - 4 (20%) nurses and stanines 7 to 9 - 16 (80%) nurses.

The expected and observed results were compared by chi-square analysis (see Table 1) and the observed scores for the whole group were determined to be significantly higher than the expected scores on both the self-perception nurse and the ideal perception nurse inventories (sc/n $X^2(2)=50.8$; $p<0.005$; ic/n $X^2(2)=37.13$, $p<0.005$). It appears that this group of nurses have higher self-perception and ideal perception scores than normal for these tests. This may be because the test was developed, in part, with students who do not have fully developed professional self-perceptions. The group of nurses tested are experienced professionals and have had time to develop a clear perception of themselves as nurses. The sample is composed of staff nurses working in specialty areas as well as nurse educators. These nurses are likely to have highly developed assessment skills and technical skills, specialized knowledge bases and complex problem solving techniques, accounting for the higher self-perception scores.

Table 1

Observed and Expected Normal Scores for Self-Perception/Nurse (sc/n) and Ideal Perception/Nurse (ic/n), n=20

	Stanine		
	1 - 3	4 - 6	7 - 9
observed sc/n	0	2	18
observed ic/n	0	4	16
expected	4.6	10.8	4.6

Note: sc/n $X^2(2)=50.8$, $p<0.005$

ic/n $X^2(2)=37.13$, $p<0.005$

Ideal and Current Self-Perception Differences per Construct

The total difference between self-perception/nurse (sc/n) and ideal perception/nurse (ic/n) and the square of the differences was calculated for each of the 38 constructs, on each inventory, for the staff nurses and the nurse educators (see Appendix G). The constructs with the most distance between sc/n and ic/n for each group were noted.

The construct (and its implicit pole) with the greatest distance between sc/n and ic/n, was determined by the square of the differences. For the nurse educators, this was even-tempered ($D^2=49$) (irritable). In this instance, the ten nurse educators scored the even-tempered end of the dichotomy on the ic/n inventory with the highest score it could receive (+2), for a group total of 20. In their perceptions of themselves as ideal nurses, they all believed they should be even-tempered rather than irritable. In reality, on the sc/n inventory, some of the nurses scored themselves farther from the even-tempered end of the dichotomy, and closer to the middle of the dyad, for a group total of 13.

Four constructs were tied for second place with less distance ($D^2 \geq 36$) between current and ideal self: consistent (inconsistent), democratic (autocratic), dynamic (passive) and tolerant (intolerant). Likewise, the nurses as a group scored their ideal perception of self (ic/n) closer to or at the

explicit pole of the dyad than to the implicit pole, and closer to the middle of the dyad in their perceptions of themselves now as determined by the sc/n inventory.

Nurse educators' current and ideal perceptions of themselves best approximated each other on eight constructs scored very close to or at the explicit pole of the following dyads: competent (incompetent), cooperative (uncooperative), friendly (unfriendly), just (punitive), mature (immature), pleasant (unpleasant), sociable (shy), and caring (disinterested). For the dyad pleasant (unpleasant), the nurse educators actually scored their current perception of themselves as slightly more pleasant than they would be ideally.

The differences in the group construct scores of the staff nurses were similarly observed. As a group, the staff nurses had much larger differences in their self-perceptions than did the nurse educators. Two constructs were tied as having the greatest distance between ideal and current self: dynamic (D^2=121) (passive) and stimulating (D^2=121) (dull). On both of these constructs the staff nurses scored the explicit pole high for the perception of ideal self and scored themselves closer to the implicit pole in their current perception of self.

Differences ($D^2 \geq 36$) also occurred between the ic/n scores and the sc/n scores for the constructs: articulate (inarticulate), enthusiastic (indifferent), sociable (shy), self-confident (insecure), creative (imitative), flexible (rigid), informed (uninformed), and approving (critical). All of these were scored close to or at the explicit pole for ideal perception of self and toward the middle of the dyad or closer to the implicit end for current perception of self.

There was no difference between the ideal and current self-perceptions of the staff nurses for the constructs: cheerful (sullen), democratic (autocratic) and fair (unfair). Very close to each other were the current and ideal self-perceptions of being: competent (incompetent), courteous (sarcastic), humble (overbearing), mature (immature), and pleasant (unpleasant). For the dyads considerate (inconsiderate) and courteous (sarcastic), the nurses perceived themselves as slightly more considerate and slightly more courteous than they would be ideally.

Ideal and Current Self-Perception Differences Within Groups

Index scores and score discrepancies for staff nurses on the sc/n inventory and the ic/n inventory are displayed in Table 2.

Index scores on the sc/n inventory for staff nurses ranged from +36 to +65 (range of possible scores -76 to +76)

Table 2

Index Scores and Differences of Nurse Educator and Staff Nurse Perceptions of Self and Ideal Self as Nurse

	Nurse Educators					Staff Nurses			
	Sc/n	Ic/n	D	D2		Sc/n	Ic/n	D	D2
T1	41	66	25	625	SN1	49	69	20	400
T2	67	74	7	49	SN2	61	72	11	121
T3	65	73	8	64	SN3	47	73	26	676
T4	63	70	7	49	SN4	62	65	3	9
T5	57	71	14	196	SN5	50	70	20	400
T6	50	69	19	361	SN6	65	71	6	36
T7	75	74	-1	1	SN7	36	47	11	121
T8	61	74	13	169	SN8	56	58	2	4
T9	61	73	12	144	SN9	53	76	23	529
T10	67	76	9	81	SN10	54	70	16	256
	607	720	113	1739		533	671	138	2552

Note: Range of raw scores -76 to +76

Sc/n = self concept/nurse

Ic/n = ideal concept/nurse

D = difference

with a mean score of 53.3, a median score of 53.5, and a SD of 8.05. Index scores on the ic/n inventory for staff nurses ranged from +47 to +76 (range of possible scores -76 to +76) with a mean score of 67.1, a median score of 70.0, and a SD of 8.15. A dependent samples t-test indicated a statistically significant difference [$t(9)=5.15$, $p<0.001$] between staff nurses' current and ideal perceptions of themselves as nurses.

Index scores and score discrepancies for nurse educators on the sc/n inventory and the ic/n inventory are displayed in Table 2.

Index scores on the sc/n inventory for nurse educators ranged from +41 to +75 (range of possible scores -76 to +76) with a mean score of 60.7, a median score of 62.0 and a SD of 9.08. Index scores on the ic/n ranged from +66 to +76 (range of possible scores -76 to +76) with a mean score of 72.0, a median score of 73.0 and a SD of 2.83. A dependent samples t-test indicated a statistically significant difference [$t(9)=4.98$, $p<0.001$] between nurse educators' current and ideal perceptions of themselves as nurses.

Ideal and Current Self-Perception Differences Between Groups

An independent samples t-test was performed to determine any significant differences between the self-perception/nurse scores for each group. No statistically significant difference was found between the current self-perceptions of

the staff nurses and the nurse educators [t(18)=1.15]. The ideal perception/nurse scores were then compared with an independent samples t-test and no statistically significant difference was determined between the staff nurses' and the nurse educators' ideal self-perceptions [t(18)=0.627].

Rank-order Repertory Grid Results

Spearman's rank-order correlations [see Appendix H] were determined for each of the participants for the non-parametric data generated by the rank-order repertory grid. Group correlation means were determined for each construct comparison (each construct compared with every other construct) for the staff nurses and the nurse educators. Correlations were accepted as statistically significant at or above a critical value of r_s=0.564 (p.=0.05) for both groups. Mean correlations for staff nurses are presented in Table 3 and mean correlations for nurse educators are presented in Table 4.

Relationships between constructs were moderate to moderately high for the staff nurses (Appendix I). The correlations can only be interpreted with respect to staff nurses' perceptions of themselves in a teaching situation as defined by the elements E1 to E10. The highest relationship was between the constructs informed and organized (0.738). Not surprisingly, when staff nurses are in a teaching

Table 3

Mean Correlation scores: Staff nurses

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Avg. C1.	----	0.629	0.466	0.500	0.480	0.352	0.392	0.315	0.283	0.236	0.178	0.447
Avg. C2.	----	-----	0.618	0.380	0.421	0.460	0.358	0.541	0.450	0.432	0.304	0.403
Avg. C3.	----	-----	-----	0.351	0.392	0.593	0.300	0.446	0.459	0.444	0.323	0.384
Avg. C4.	----	-----	-----	-----	0.264	0.486	0.408	0.275	0.350	0.467	0.310	0.677
Avg. C5.	----	-----	-----	-----	-----	0.443	0.419	0.641	0.492	0.408	0.459	0.362
Avg. C6.	----	-----	-----	-----	-----	-----	0.244	0.413	0.465	0.562	0.492	0.494
Avg. C7.	----	-----	-----	-----	-----	-----	-----	0.413	0.486	0.299	0.215	0.414
Avg. C8.	----	-----	-----	-----	-----	-----	-----	-----	0.738	0.590	0.503	0.461
Avg. C9.	----	-----	-----	-----	-----	-----	-----	-----	-----	0.633	0.455	0.414
Avg. C10.	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.420	0.420
Avg. C11.	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.376
Avg. C12.	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 4

Mean Correlation scores: Nurse educators

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Avg. C1.	----	0.409	0.391	0.543	0.398	0.418	0.474	0.240	0.277	0.219	0.380	0.542
Avg. C2.	----	-----	0.446	0.509	0.654	0.586	0.462	0.286	0.250	0.459	0.607	0.370
Avg. C3.	----	-----	-----	0.482	0.438	0.593	0.447	0.301	0.170	0.404	0.498	0.369
Avg. C4.	----	-----	-----	-----	0.431	0.472	0.461	0.126	0.086	0.465	0.558	0.497
Avg. C5.	----	-----	-----	-----	-----	0.620	0.495	0.347	0.397	0.406	0.539	0.370
Avg. C6.	----	-----	-----	-----	-----	-----	0.548	0.316	0.386	0.483	0.558	0.504
Avg. C7.	----	-----	-----	-----	-----	-----	-----	0.306	0.284	0.427	0.519	0.574
Avg. C8.	----	-----	-----	-----	-----	-----	-----	-----	0.713	0.198	0.259	0.200
Avg. C9.	----	-----	-----	-----	-----	-----	-----	-----	-----	0.259	0.168	0.166
Avg. C10.	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.527	0.434
Avg. C11.	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.570
Avg. C12.	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

situation where they can perceive themselves to be informed, they can perceive themselves as organized and creative (0.641). The construct informed was also correlated with respect (0.590). Respect was correlated with organized (0.633), and competent was correlated with articulate (0.618) and enthusiastic (0.593) The constructs courteous and caring had a correlation score of 0.677, but unexpectedly, caring was not significantly correlated with any of the other constructs. Articulate and accepting were correlated (0.629) but the constructs flexible and stimulating were not significantly correlated with any of the constructs (p.=0.05).

Relationships between the constructs were moderate to moderately high for the nurse educators also (Appendix J). Again, the correlations can only be interpreted with respect to a teaching situation as defined by the elements E1 to E10. As with the staff nurses, the construct informed formed the highest relationship with the construct organized (0.713). The construct articulate was related to creative (0.654), enthusiastic (0.586) and stimulating (0.607). Stimulating and enthusiastic were related (0.620), as were enthusiastic and competent (0.593). Caring was correlated with flexible (0.574) and stimulating (0.570). The constructs respect, courteous and accepting were not significantly related to any of the constructs (p.=0.05).

Other Findings

Further statistical analysis revealed the strength of the relationship between the constructs. The correlation scores were squared and multiplied by 100 (Fransella and Bannister, 1977, pp. 33-35), to determine a relationship score for each construct (see examples Appendix K & L). The construct with the highest relationship score was most closely related to all of the other constructs. For staff nurses the scores were: informed (score=278), enthusiastic (220.2), organized (187.7), articulate (167.3), caring (142.9), creative (100.8), courteous (85.62), competent (61.07), respectful (32.24), flexible (20.07), with accepting (3.174) and stimulating (3.174) least related to all other constructs. For nurse educators, the scores were: enthusiastic (283.1), stimulating (233.3), creative (179.2), flexible (153.9), courteous (127.4), articulate (85.97), informed (73.81), caring (68.73), competent (34.63), organized (14.43), with accepting (4.813) and respectful (4.813) least related to all other constructs.

At the end of each self-perception inventory, nurses were given the opportunity to indicate other dimensions they thought were important for an effective nurse. Two of the nurse educators responded for the sc/n inventory with "honesty (dishonesty)" and "able to make decisions" (no contrasting pole supplied but it is assumed that it would be "unable to make decisions"). Only "honesty (dishonesty)" was included on

the ic/n form for the nurse educators. One staff nurse responded with "approachable (unapproachable)" for both inventories. The other nurses in both groups did not offer any other constructs. Either they believed that the constructs provided were generally representative of their perceptions or, they were fatigued from completing the inventories and could not be bothered.

The Research Questions

Question One: Is there a difference between nurses' current and ideal perceptions of themselves as nurses?

There was a statistically significant difference between current self-perception and ideal self-perception for staff nurses [$t(9)=5.15$, $p<0.001$) as determined by the Self-Perception Inventory (Soares, 1983). The differences are best illustrated by the information in Appendix G which indicates the differences per construct with regard to staff nurses' current and ideal self-perceptions.

All but three of the staff nurses' ideal perceptions of themselves were rated higher than their current perceptions of themselves. For the dyads: considerate/inconsiderate, courteous/sarcastic and lenient/strict, the staff nurses rated their current perceptions of self slightly higher than what they believed they should be ideally. They believed they were more considerate, courteous and lenient than the ideal nurse

should be. In fact, in their perception of the lenient/strict dyad, the staff nurses' current perception of self leaned toward the lenient side while their ideal perception was very close to being neither lenient nor strict. Five constructs that were rated as ideal did not receive high scores in these ratings, meaning that although they were part of the nurses' perceptions of an ideal nurse, the ideal nurse should fall somewhere below the explicit end of the construct dyad. These constructs were: approving, democratic, humble, lenient and outgoing.

There were large differences between ideal self and current self on ten of the constructs. The ideal self was rated highly with a score of 17 or greater out of a possible score of 20. The current self varied from the ideal self and was situated either between the poles of the construct with a score around ten (meaning their perception may have attributes of both constructs but is really neither one end nor the other end of the dichotomy) or, closer to the implicit end of the construct with a score less than ten. The staff nurses perceived themselves varying greatly with respect to ideal and current self on the following three constructs: more passive than dynamic, more dull than stimulating, more inarticulate than articulate. Their ideal was rated highly articulate. They were more critical than approving but did not perceive their ideal as entirely approving either.

Their ideal was also more creative than the nurses perceived themselves, they were neither creative nor imitative. The staff nurses also perceived their ideal self as enthusiastic, but they themselves tended toward indifference. The staff nurses were also less flexible, informed, self-confident, and sociable than their ideal.

There was a statistically significant difference between current self-perception and ideal self-perception for the nurse educators ($t(9)=4.98$, $p<0.001$) as determined by the Self-Perception Inventory (Soares, 1983). The differences are best illustrated by the information in Appendix G which indicates the differences per construct with regard to nurse educators' current and ideal self-perceptions.

The nurse educators had neither as large a difference in their current and ideal self-perceptions, nor the number of differences in their perceptions that the staff nurses did. This may have occurred because nurse educators teach to the ideal concept of a nurse and likely embody the characteristics of an ideal nurse in their role modelling. All of the ideal constructs but one were rated higher than the perception of current self. For the dyad pleasant/unpleasant, the nurse educators perceived themselves as slightly more pleasant than they believed the ideal nurse should be. Only three dyads had ideal nurse scores less than 17 out of a possible score of 20,

indicating that the nurse educators believed that an ideal nurse should not be absolutely approving, humble, or lenient. In fact, their current self-perception demonstrated that they perceived themselves to be neither approving nor critical, neither humble nor overbearing, and neither lenient nor strict.

Nurse educators' perceptions of themselves differed the most on five dyads. The explicit ends of these dyads recieved a score of 19 or 20 indicating that the educators essentially perceived the ideal nurse as consistent, democratic, dynamic, even-tempered and tolerant. They were, in their current perception of self, less than the ideal and closer to the middle of the dyad with scores of 13 or 14. They were closer to the perception of themselves as not inconsistent but not always consistent, not autocratic but less democratic than the ideal, not as dynamic as the ideal but not passive either, not nearly as even-tempered as the ideal but not irritable, and less tolerant than they would be ideally but not intolerant. The largest difference occurred in the even-tempered/irritable dyad, possibly as a function of the frustrations inherent in teaching complex nursing skills or even as a result of nurse educators' high expectations of themselves in a dual role as educators as well as nurses. Kramer (1974) states that nurse educators maintain higher ideal perceptions of self after graduation than staff nurses do.

Question Two: How do the self-perceptions of staff nurses differ from the self-perceptions of nurse educators?

There was no statistical difference in either the staff nurses' and the nurse educators' current self-perceptions [t(18)=1.15] or their ideal self-perceptions [t(18)=0.627] as determined by the Self-Perception Inventory (Soares, 1983). The independent samples t-test, like most statistical tests, looked only at the numbers for the groups and not at the constructs individually. Despite this finding, two interesting trends were noted. The staff nurses generally rated themselves lower than the nurse educators on both their current self-perceptions and their ideal self-perceptions. Many of the current self-perceptions of both groups were rated similarly but the largest differences were apparent where the staff nurses perceived themselves as less articulate, less creative, less dynamic, less lenient, less outgoing, less sociable, less stimulating and far less enthusiastic (D=10), than the nurse educators. Nurse educators may function more independently in their roles and have more experience with being articulate, creative and stimulating than one could imagine the institutional atmosphere of a hospital nurturing. Staff nurses, because of hospital cutbacks and the ensuing increased patient assignments, and as a result of their interdependence with the medical model of illness and health, may have less time to be social and less latitude for

independent practice, creativity and developing the skill of being articulate.

Question Three: Is there a difference in how staff nurses and nurse educators perceive themselves as educators?

The data generated by the repertory grid are more complex and as a result are more difficult to analyze. A construct map (Figure 1) for the staff nurses and the nurse educators indicates the constructs significantly related to each other in the experience of teaching as defined by the elements E1 to E10 for the staff nurses as a group and the nurse educators as a group. The two groups, as educators, share the constructs informed, organized, creative, caring, competent, articulate and enthusiastic but differ in the relation of these constructs to each other. These shared constructs are related to other constructs perceived uniquely by the staff nurses (respect, accepting, courteous) and other constructs perceived uniquely by the nurse educators (stimulating, flexible).

The perceptions of being informed and organized are strongly correlated for both of the groups in the experience of teaching but are independent of the other constructs perceived by the educators while being correlated to several of the constructs perceived by the staff nurses. The educators had more inter-correlations than the staff nurses did. The staff nurses had three separate spheres of

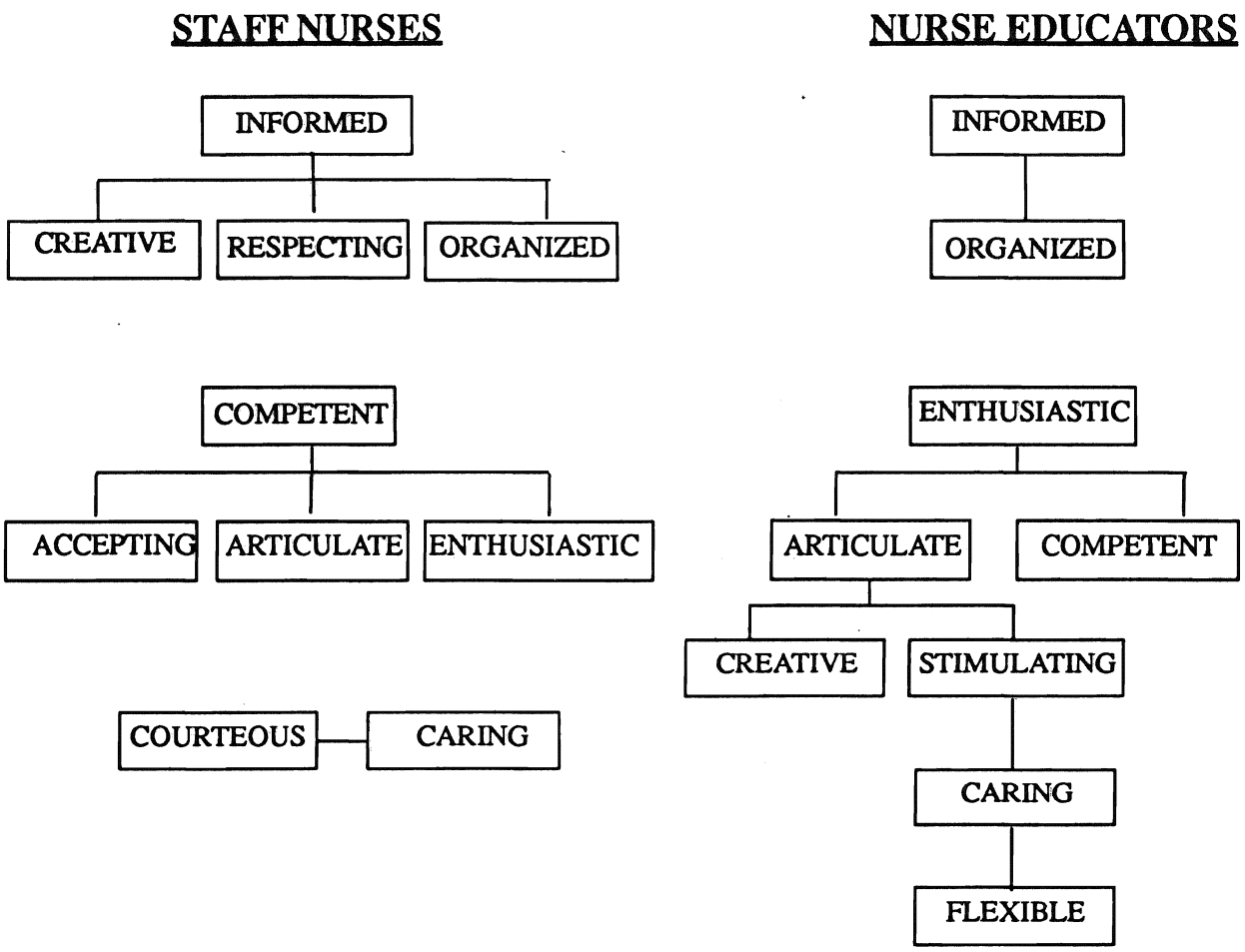

Figure 1. Relationship of significant constructs operating in staff nurses' and nurse educators' perceptions of themselves as educators.

correlations; the educators two. It is possible that teaching is more integrated in the perceptions of the nurse educators as it is the focus of their careers; whereas the nurses perceive it as a part of, but not the heart of, their nursing careers.

Question Four: Can factors influencing nurses' perceptions of themselves as educators be identified?

Factors influencing nurses' perceptions of themselves as educators could not be directly identified from either the SPI or the adapted rank-order repertory grid. However, the nurses' demographic data furnished an interesting, if incomplete, profile of factors that could be inferred to influence nurses' perceptions of themselves as educators.

One hundred percent (10) of the staff nurses were female and they all worked in hospitals in a specialty area. Certain specialty areas of the hospital lend themselves to patient education (i.e., obstetrics and gynecology) whereas other areas such as an Intensive Care Unit may involve markedly less patient teaching because of its critical care focus. Although all of the staff nurses claimed that they taught patients, students, peers and/or others, none of them identified themselves as being employed in education (Qu. 10, Appendix E). This question may have been misconstrued as meaning primary or sole employment in education although the

questionnaire did specifically direct participants to check as many options as applied. It may be that these staff nurses do not consider education the primary focus of their patient care, although Redman (1993) claims that health professionals should view every patient encounter as an opportunity for teaching and learning.

All of the nurse educators were employed in education. As well, some of the educators checked the specialty practice area. At least one of the educators worked part-time teaching and part-time as a staff nurse in a specialty area of a hospital. It is not known whether the other three educators considered their work in a specialty area a part of their clinical teaching assignment or whether they too were employed by a hospital, as well as an educational institution. Teachers have usually been staff nurses at one time or another and may not want to or be able to let go of that role (Infante, 1986).

Half of the staff nurses were hospital educated and presumably steeped in the traditions of that nursing model. The other half of the staff nurses were educated at the college level (20% including one hospital educated nurse) or at the baccalaureate level (40%). It is suspected that these educational institutions may have varied widely in how much and what was taught about teaching to these nurses as only two (20%) of the staff nurses claimed to have learned about

teaching at the undergraduate level (60% of the staff nurses believed that their school valued teaching, though). All of the educators learned about teaching at the undergraduate level and 90% of them believed that their programme valued teaching. The nurse educators appear to have more positive perceptions regarding the attitude of their nursing schools toward teaching and education. The fact that they are educators now may have originated in these early perceptions of the value of education.

The staff nurses had a mean age of 37.2 years and a mean number of years of nursing practice of 15.7 years. The nurse educators had a mean age of 39.7 years (9 replies only to this question) and a mean number of years of practice of 16.2. Both groups of nurses have had more nursing or teaching experience and are older than most new nursing graduates. It is likely that the educators spent some time in direct patient care before going on to teaching. The educators may have seen teaching as the next logical step in their careers, they may have wanted to escape a hospital nursing practice that they did not care for, or they may have always wanted to teach. The nurse educators, in teaching to the ideal all of the time, may have more fully integrated that perception into their repertory of role constructs. They may have spent more time thinking about and defining the ideal nurse role for their students and therefore are cognizant of strategies that enable one to be more like the ideal. This would account for their

closer perceptions of current and ideal self. The staff nurses, although they have spent almost as many years in practice, have likely spent them all in practice. Life stage developmental theory may be useful in interpreting how age and work experience impact on nurses' self-perceptions.

Patient education has received a big consumer push only recently (Redman, 1993) and although staff nurses have always educated patients, it may only be now that their employers are supporting them in their efforts. The role had never previously been validated from an administrative viewpoint and, therefore, was presumed to have been non-existent or unimportant. Two of the staff nurses affirmed that administrative support was crucial if they were to be able to educate patients in their clinical practice.

Question Five: Are the roles of staff nurse and nurse educator overlapping or mutually exclusive roles?

The roles of staff nurse and nurse educator appear to be overlapping roles. Staff nurses teach and nurse educators teach. They all teach students, patients, other nurses and peers, families and communities. They are socialized (and socialize) by the same forces - the history of nursing, gender/power issues, and social, political and environmental factors. As they construe themselves as educators, the staff nurses have more difficulty identifying themselves as

teachers. It becomes apparent that they do teach when asked to describe themselves and what they do. Teaching may be so basic a part of the nursing role for these nurses that they do not think of it as a separate entity, or they may be defining their role as a teacher in the more traditional sense of teacher/pupil.

All of the constructs from the SPI were shared between the groups of nurses, some more powerfully defining and influencing perceptions than others. It is the relationship between the constructs that seems to be different for staff nurses and nurse educators as they perceive themselves as teachers.

CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

Summary

Nurses recognize patient education as an important part of their nursing practice and have included patient education as part of their practice and nursing education since the beginning of the twentieth century. However, nurses do not always believe that they have the time, energy, resources and support to do a satisfactory job of health teaching. Their perception of themselves as educators suffers as they become aware of the dissonance in their current and ideal perceptions of themselves as nurses in the reality of everyday practice.

The development of nurses' self-perceptions during the socialization of student and graduate nurses was discussed as it related to constructivist and phenomenological viewpoints. Kelly's (1955) theory of personal constructs formed the theoretical framework used to study nurses' perceptions of themselves as nurses and as educators.

To determine the self-perceptions of a small group of staff nurses and nurse educators, a Self-Perception Inventory (Soares, 1983) was administered. A rank-order repertory grid, adapted from Kelly's (1955) Role Construct Repertory Test, was constructed by each nurse using 12 constructs isolated from

the SPI, to discover nurses' perceptions of self in a teaching situation. Analysis revealed statistically significant differences between current and ideal self-perceptions within each group of nurses. Although there was no statistical difference in self-perceptions between the two groups, further observation of the data revealed some diversity in the application of constructs and their relationships with each other as the two groups of nurses defined themselves as educators. Several constructs were shared between the groups which seemed to indicate overlapping role boundaries (Fig. 1).

Discussion

Nurses recognize comprehensive patient education as an important but somewhat elusive part of their nursing practice. The value of the process and content of patient education is instilled during the socialization of student nurses but, these students graduate into a world of nursing practice that confounds some of their best efforts to provide patients with health education. Economic and political conditions dictate nursing and allied health care staff cutbacks (and little time for extended anticipatory guidance for new graduates) resulting in larger patient assignments. When physical and emotional care occupy much of the nurse's work day, it is easy to let learning needs slip and hope that someone else will have the time and energy for patient

teaching.

This study was initiated because several staff nurses employed in a large Toronto teaching hospital wanted to teach their patients and wanted to teach them well and often went to great and sometimes heroic lengths to find the time and resources to do so. Yet, many of these same nurses did not perceive themselves as "teachers" even when most of their interactions with patients consisted of health education. It was their perceptions of themselves as nurses and as educators and how those perceptions compared with a group of nurses who identified themselves as educators that piqued the curiosity of the investigator.

The development of nursing as a profession and its historical struggles with gender/authority/autonomy issues have influenced nurses' current and ideal perceptions of themselves as nurses. Some of the conflicts for nurses originate within the discordance of academic institutions, professional organizations and labour unions as they differ and are polarized about what a nurse is and what a nurse does. This internal fragmentation does little to bolster the self-perceptions of nurses and can be construed as possibly leading to even more confusion and disruption within the profession. A united voice would be a powerful instrument for both the socialization of new and aspiring nurses and the social reconstruction of nursing as a strong and concordant

profession.

Kelly's (1955) Personal Construct Theory provided the framework for determining how nurses interpret their personal experience of nursing and teaching. Although each nurse has a personal system of constructs that defines her as a nurse and as an educator (individuality corollary, Kelly, 1955), certain characteristics are shared by nurses as a group (commonality corollary, Kelly, 1955). Consistent with Kelly's (1955) sociality corollary, the definition of nursing is largely grounded in a social context of others' perceptions of what a nurse is and what a nurse does.

What a nurse is and does often depends on how he or she was educated and where he or she is employed. Perceptions of a nurse as technician, and doctor's assistant persist because this is the role that many nurses perform. Christman's (1991) discussion of the fragmented nursing education system in the United States claims that role blurring occurs among nurses because of the variety of entry points to the profession and because the majority of nurses in practice and in daily contact with the public have "less-than-professional educations" (p. 210). Their role perception is fixed by the knowledge of the role that they possess; if a scientific knowledge base is lacking, then their role perception does not include that. Other professionals interact with a group of nurses holding this perception of themselves and come to

define the entire profession in this manner. Those nurses professionally prepared at the bachelor's, master's and doctoral levels have limited, if any, contact with these nurses and other health care professionals and therefore little chance to provide alternative role models and guidance (Christman, 1991). This holds true for the nurse educators in this study, 100% of whom are educated at the bachelor's level, and 70% at the master's level (education and arts). Nurse educators come into contact with staff nurses and other professionals in a limited capacity as teachers of students and rarely, as role models of the professional nurse. In contrast, 40% of the staff nurses are prepared at the bachelor's level and half of those nurses work part-time only. None of the staff nurses had any preparation at the graduate level. Although graduate education is not the sole predictor of professional behaviour, other professions often use graduate preparation as a benchmark in their role definitions.

At the risk of simplifying Kelly's theory of personal constructs, if a person perceives herself to be different from others by her construction of events, and if she construes and anticipates events by their replication and, by choosing alternatives in her construction system, extends or defines her experience in the world, then a nurse who chooses to be educated at the graduate level would change her own

perceptions of self as well as how others perceive her in her professional role. There is power in knowledge and critical reflection (Lather, 1991) and Kelly's Personal Construct Theory gives us a vehicle through which experience can be deconstructed, examined and reconstructed in ways beneficial and meaningful to each of us.

The reality of nursing is that hospitals are the largest employers of nurses and that the majority of nurses are female. In the United States, 97 percent of 1.7 million registered nurses are women and 83 percent of physicians are men (Rounds, 1993). Seventy percent of nurses work in a hospital with the national average maximum salary at $39,564 (Rounds, 1993).

Most nursing positions require 24-hour coverage necessitating shift work which, coupled with the fact that many nurses have families in which they do a great deal or all of the care giving, makes a return to school for higher education a formidable task. This is especially so when that level of education may not be required to continue to do one's job. Although pay levels have increased in the United States and Canada recently, pay equity issues are difficult to resolve in a profession with no perceptible social or economic equivalent. It is no wonder then, that there are discrepancies in the real and ideal self-perceptions of nurses.

The culture of nursing is as inextricable from its historically and socially defined roots as it is from the gender issues that affect it. The social construction of gender affects the self-perception of nurses in subtle and not-so-subtle ways. Labelling behaviour as masculine or feminine denies half of the population the opportunity for the full expression of their human capacity (Hare-Mustin and Marecek, 1990). In their discussion of the consequences of alpha bias (i.e., the tendency to exaggerate differences) in the construction of gender as difference, Hare-Mustin and Marecek (1990) claim that it is common for culture to perceive the traits of masculine and feminine not only as different but opposite and mutually exclusive. This is reflected in well-established psychological tests and theory, as culture struggles to define masculine and feminine. Citing Constantinople (1973), Hare-Mustin and Marecek (1990) explain that these tests simply measure the differences in the responses of men and women. The usefulness of the male-female construct is questioned because inherent in this thinking is the idea that in order to be one thing (e.g., feminine), one simultaneously denies the other (e.g., masculine). The notion of dichotomies is basic to Kelly's Personal Construct Theory as Kelly himself states, "contrast is an essential feature of all personal constructs, a feature upon which their very meaning depends" (Kelly, 1963, p.71). Kelly believed that you

could infer as much about a person by what they did not say as by what they did say. Problems arise when male and female are construed as opposite: it is presumed that elements of one gender cannot be subsumed by the other, it supports the idea that men and women reside in "separate spheres" (Hare-Mustin & Marecek, 1990, p.43) although in reality many women occupy both spheres (i.e., work both inside and outside the home); it infers a relationship that is equal when in fact the male/female relationship is largely unequal in society. It therefore maintains the status quo.

If caring, relatedness and compassion were solely female traits, there would not be "male nurses" who care, female or male physicians who are compassionate (socialized as they are by a traditionally male-defined profession), or fathers who care about and for and who are quite able to relate to their children and families. If autonomy, rules and rationality were exclusively male traits, there would not be "male nurses" who care, female or male physicians who are compassionate, or fathers who care about and for their families. Recognizing that we are all a combination of traits, and that it is a unique interpretation of these traits that each of us contributes to the world, is what should define us as human beings.

Kelly's (1955) dichotomy corollary states that people construe their worlds in terms of a finite number of

dichotomous constructs. The notion of dichotomizing one's experiences in the world, categorizing experience into similarities and contrasts, would appear to fly in the face of feminist theory which struggles to deconstruct and examine such restrictive and divisive ideas. Kelly claimed that one could locate oneself anywhere along the continuum from one pole to the other which means that an individual could be one thing or the other, or slightly more one thing than the other, or equally parts of both depending where on the continuum one located oneself. He did not prescribe roles according to the interpretation of what that role should be according to social definitions. One rejects or does not adopt dichotomous constructs if they do not serve any purpose in extending or defining one's perception of self, however, the nurses in this study may have been operating on a learned way of seeing the world. It is difficult to believe that any theory could even begin to describe the complex nature of human experience. Language, too, seems insufficient as many times one cannot find "the right words" to convey meaning that is in danger of being misconstrued.

Participants were asked, after they had completed the SPI, if they had experienced any difficulty placing their perceptions at or between the poles of the dichotomous traits. All but two nurses denied having difficulty, and those who had problems, appeared to have the most trouble with the meaning of the words describing the constructs. Denial of difficulty in a research situation does not preclude problems,

only perhaps an attempt to keep the investigator happy, and should prompt reflection on what that denial means. The construct dyad that seemed the most difficult for all of the nurses to interpret was respecting/disparaging. It is possible that this dyad (or any of the others), because it was a provided rather than elicited construct, did not describe nurses' self-perceptions as well as expected. In fact, the chi-square test indicates that the observed responses on the SPI were significantly higher than the expected responses for the SPI. This may indicate the provided descriptions of nurses' self-perceptions were not as sophisticated or as highly developed as the self-perceptions of the nurses in this study. As the SPI was developed on baccalaureate undergraduate nursing students, hospital nursing students and staff nurses, it would not necessarily contain constructs exclusive to a group of experienced, professional nurses.

Five of the nurses volunteered that the process of self-reflection involved in the completion of the SPI (Soares, 1983) and the adapted rank-order repertory grid had made them think about their careers in a different way. One nurse educator believed she was "inflating" herself when she had finished the SPI. Many of the staff nurses claimed that in their practice, they had the most difficultly with being a role model and coordinating other members of the health care team to teach. Most often this meant trying to get a physician to teach or to explain a patient's treatment to

them. Sometimes it meant having to "do it all" oneself. All of the nurses seemed pleased that someone had taken an interest in their perceptions of themselves as nurses.

Conclusions

The conclusions apparent after analysis and synthesis of the data in this study apply to the sample of staff nurses and nurse educators who willingly gave up their time to complete the Self-Perception Inventory (Soares, 1983) and the adapted rank-order repertory grid. Their perceptions of themselves as educators apply to a teaching situation as defined by the elements provided. The convenience sampling technique restricts generalization of the data to the sample studied, however, many of the extraneous variables discussed affect the entire population of nurses. The following conclusions are determined from the study:

(1) Nurses' perceptions of themselves as nurses and as educators are determined by a number of factors including the historical development of nursing as a profession, the philosophical beliefs and values and the socializing influences of their basic nursing programmes, how others perceive them as nurses, gender issues generally, and gender issues specifically operating in the health care profession, and must be examined in these contexts.

(2) Kelly's (1955) theory of personal constructs appears to

be an effective theoretical framework within which nurses' self-perceptions can be identified and measured. The nurses in this study appeared to have little difficulty describing themselves in terms of dichotomous constructs. Elicitation of the constructs and elements would provide a more sensitive and possibly more accurate, if more time-consuming, picture of the nurses' perceptions than providing the constructs and elements.

(3) There are statistically significant differences in current and ideal self-perceptions within each group of staff nurses and nurse educators largely reflecting socialization processes in nursing education and social expectations of the role of the nurse. University and college education programmes may need to evaluate and redefine the ideal that they espouse. Employers should be aware of the different perceptions of their nurses and try to accomodate these in patient assignments and teaching assignments. Nursing and hospital administrators should be aware of the importance of their support for nurses who do health teaching.

(4) There is no statistical difference in the perception of self or ideal self as a nurse between the group of staff nurses and nurse educators. This probably reflects their similar socialization as nurses. Further observation of the data revealed that the nurses employ a variety of constructs in their perceptions of themselves as teachers. Some of the constructs are shared between the groups, others are unique to

each group of nurses. The relationship between the constructs was different for each group also. This reflects the diverse populations they each teach, what they teach, how they teach, and their experiences with teaching and nursing. It may indicate that these constructs are representative: of nurses who teach (anywhere) or only in those who teach well; antecedently, in those people who choose nursing as a career, or; even that nurses are socialized to adopt these constructs in their development of self-perception and how they learn to structure knowledge during their nursing education.

(5) Nurses were unanimous in their pleasure that someone was interested in what they had to say and was taking the time to listen to their thoughts. Almost every nurse took extra time during the interview to share her thoughts about the political state of the health care system, her satisfactions and dissatisfactions with her career in nursing and, especially with respect to the adapted rank-order repertory grid exercise and how it interpreted her practice.

Additional Issues

Several additional issues for consideration are identified from this study :

(1) Recognize and affirm the power that nurses have. Scrutinize the location, origins, and practices of power within the health care system. Once identified, nurses can

assimilate these practices or, alternatively, reject them and redefine their own notions of power. Get politically involved. Ensure that the voice of nursing is heard at administrative and political levels by electing nurses in these areas. Be aware of and ready to confront moves made against nurses as they (re-)define themselves.

(2) Determine and describe the barriers that prevent nurses from continuing their education at the graduate level and specify ways to make graduate education more accessible (i.e., create flexible entrance requirements, take education to the nurses, particularly shift workers; increase and improve child care arrangements in workplaces and educational institutions; create a system of financial rewards that recognizes the efforts and accomplishments of nurses with extra education).

(3) Continue endeavors to increase the economic value of caring by increasing the wages and benefits of those who do the caring. The social and moral value of caring will surely rise in response.

(4) Define the "ideal" nurse currently espoused and if necessary, redefine this concept to reflect what nursing is and does and aspires to now, rather than perpetuating a grossly inaccurate stereotype rooted in the last century. Lather (1991) claims that "...we can come to understand our own collusion...to understand how we are caught up in power situations of which we are, ourselves, the bearers..." (p.144). This can be accomplished through research that determines what nurses' perceptions and definitions of an

ideal nurse are and, education that teaches to a realistic ideal.

(5) Reflect on the development and the nature of nursing. Ask where it is going and what it wants to accomplish. Recognize that the possibility for change and growth within the profession is at the heart of the philosophy of nursing.

(6) Critically reflect on individual perceptions. Ask where they came from and whether or not they are still meaningful and/or valid. Occasionally, take the path of most resistance to challenge established constructs and test new constructs. Kelly's (1955) Personal Construct Theory lends itself to providing the framework for change.

(7) In hospitals and community health agencies, consider the use of nurses whose primary responsibility it is to educate patients and the community. A limitation of this idea may be that this nurse will not be present when that elusive teachable moment occurs.

(8) Consider an exclusive period of teaching apprenticeship for nursing students similar to that of student teachers. The process of teaching, as well as the content of teaching should be an entire course for students as well as being included in every single facet of the nursing curriculum. Sharing classes with students in the Faculty of Education might shape students' perceptions of themselves as teachers in a positive manner.

Recommendations

This study appears to have generated more questions than it set out to answer. Recommendations for research to address these questions are as follows:

(1) Design changes considered to improve this study:

-larger sample size from different sites

-randomization of the sample

-elicitation of elements and constructs from the subjects

-more complex statistical analysis of data from a larger sample (i.e., coefficient of concordance to determine to what extent the two groups of nurses agree within and between groups as well as to determine to what extent the elements agree with the constructs; Slater's INGRID principal components analysis programme, see Fransella & Bannister, 1977).

-employ comments made by nurses during grid exercise.

(2) Further research using Kelly's (1955) Personal Construct Theory (especially repertory grid technique) or ethnographic enquiry to explore nurses' perceptions of themselves as nurses and as educators. Expand the small, existing personal construct theory nursing research base either by replicating the few existing studies, or developing new studies based on Kelly's work.

(3) Longitudinal studies should be undertaken to study the development and evolution of nurses' perceptions of

themselves and to understand how women construct meaning about themselves, others, and their environment.

(4) Study the effectiveness of anticipatory socialization programmes (preceptorships) on nurses' perceptions of themselves as nurses.

(5) Determine ways to increase staff nurses' positive perceptions of themselves as educators.

(6) Study the contribution of increased interaction and enhanced communication between staff nurses, nurse educators and students on the self-perceptions of all.

This study has explored how nurses construe themselves as educators. Significant differences were found between nurses' current and ideal perceptions of themselves; no statistical difference was determined between the current and ideal perceptions of staff nurses and nurse educators as groups. Staff nurses and nurse educators differ in several specific constructs that they use to perceive themselves in a teaching situation. The relationship between these constructs varies for the two groups also. The research questions were answered. Additional considerations arising from the study were outlined. Recommendations for further research were made. The study has added to a small body of research using personal construct theory to determine nurses' perceptions. The purposes outlined for this research report have been fulfilled.

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Student Number _____ Course Number _____

Program: RN [or] Basic Undergraduate Year _____

SELF-PERCEPTION INVENTORY (N

Form SC$_{N}$

People are different in the ways they think about themselves. We are interested in discovering what kind of nurse you believe yourself to be like at this moment. Therefore, you are requested to describe yourself, as you now are, by placing a check in one of the four spaces on the line between two words which are opposite in meaning. Each line represents how well the adjective fits your perception of your self as a nurse.

Example:

quiet	✓	:	:	:	loud
	very quiet	: more quiet than	: more loud than	: very loud	
		:	: loud than	: quiet	

Look at the words at both ends of the line before you decide where to place your checkmark. Work rapidly; give your first reaction to the items, since your first answer is likely to be the best. Please do not omit any items and mark each item only once. Remember: there are no right or wrong answers--only answers which best describe yourself as a nurse.

(1)	accepting	:	:	:	rejecting	(1)
(2)	approving	:	:	:	critical	(2)
(3)	articulate	:	:	:	inarticulate	(3)
(4)	cheerful	:	:	:	sullen	(4)
(5)	competent	:	:	:	incompetent	(5)
(6)	considerate	:	:	:	inconsiderate	(6)
(7)	consistent	:	:	:	inconsistent	(7)
(8)	cooperative	:	:	:	uncooperative	(8)
(9)	courteous	:	:	:	sarcastic	(9)
(10)	creative	:	:	:	imitative	(10)
(11)	democratic	:	:	:	autocratic	(11)
(12)	dynamic	:	:	:	passive	(12)
(13)	enthusiastic	:	:	:	indifferent	(13)
(14)	even-tempered	:	:	:	irritable	(14)
(15)	fair	:	:	:	unfair	(15)
(16)	flexible	:	:	:	rigid	(16)
(17)	friendly	:	:	:	unfriendly	(17)
(18)	humble	:	:	:	overbearing	(18)
(19)	industrious	:	:	:	lazy	(19)
(20)	informed	:	:	:	uninformed	(20)
(21)	just	:	:	:	punitive	(21)
(22)	lenient	:	:	:	strict	(22)
(23)	mature	:	:	:	immature	(23)
(24)	neat	:	:	:	untidy	(24)
(25)	optimistic	:	:	:	pessimistic	(25)
(26)	organized	:	:	:	unorganized	(26)
(27)	out-going	:	:	:	withdrawn	(27)
(28)	patient	:	:	:	impatient	(28)
(29)	pleasant	:	:	:	unpleasant	(29)
(30)	poised	:	:	:	awkward	(30)
(31)	respecting	:	:	:	disparaging	(31)
(32)	self-confident	:	:	:	insecure	(32)
(33)	sociable	:	:	:	shy	(33)
(34)	stimulating	:	:	:	dull	(34)
(35)	tolerant	:	:	:	intolerant	(35)
(36)	understanding	:	:	:	unsympathetic	(36)
(37)	caring	:	:	:	disinterested	(37)
(38)	independent	:	:	:	dependent	(38)

ADD OTHER DIMENSIONS WHICH YOU THINK ARE IMPORTANT FOR AN EFFECTIVE NURSE.

(39)	----------	:	:	:	----------	(39)
(40)	----------	:	:	:	----------	(40)

(appendix continues)

Student Number_____ Course Number_____

Program: RN [or] Basic Undergraduate Year_____

SELF-PERCEPTION INVENTORY (N)

Form IC$_N$

What kind of nurse would you like to be? Give a picture of the kind of nurse you wish you could become by placing a check in one of the four spaces on the line between the two words which are opposite in meaning. Each space represents how well the adjective fits your ideal of what kind of nurse you think you should be.

Example:

quiet	:	✓ :	:	:	loud
	very quiet	more quiet than loud	more loud than quiet	very loud	

Look at the words at both ends of the line before you decide where to place your checkmark. Work rapidly; give your first reaction to the items, since your first answer is likely to be the best. Please do not omit any items and mark each item only once. Remember: there are no right or wrong answers -- only answers which best describe what kind of nurse you would like to be.

(1)	accepting	:	:	:	rejecting	(1)
(2)	approving	:	:	:	critical	(2)
(3)	articulate	:	:	:	inarticulate	(3)
(4)	cheerful	:	:	:	sullen	(4)
(5)	competent	:	:	:	incompetent	(5)
(6)	considerate	:	:	:	inconsiderate	(6)
(7)	consistent	:	:	:	inconsistent	(7)
(8)	cooperative	:	:	:	uncooperative	(8)
(9)	courteous	:	:	:	sarcastic	(9)
(10)	creative	:	:	:	imitative	(10)
(11)	democratic	:	:	:	autocratic	(11)
(12)	dynamic	:	:	:	passive	(12)
(13)	enthusiastic	:	:	:	indifferent	(13)
(14)	even-tempered	:	:	:	irritable	(14)
(15)	fair	:	:	:	unfair	(15)
(16)	flexible	:	:	:	rigid	(16)
(17)	friendly	:	:	:	unfriendly	(17)
(18)	humble	:	:	:	overbearing	(18)
(19)	industrious	:	:	:	lazy	(19)
(20)	informed	:	:	:	uninformed	(20)
(21)	just	:	:	:	punitive	(21)
(22)	lenient	:	:	:	strict	(22)
(23)	mature	:	:	:	immature	(23)
(24)	neat	:	:	:	untidy	(24)
(25)	optimistic	:	:	:	pessimistic	(25)
(26)	organized	:	:	:	unorganized	(26)
(27)	out-going	:	:	:	withdrawn	(27)
(28)	patient	:	:	:	impatient	(28)
(29)	pleasant	:	:	:	unpleasant	(29)
(30)	poised	:	:	:	awkward	(30)
(31)	respecting	:	:	:	disparaging	(31)
(32)	self-confident	:	:	:	insecure	(32)
(33)	sociable	:	:	:	shy	(33)
(34)	stimulating	:	:	:	dull	(34)
(35)	tolerant	:	:	:	intolerant	(35)
(36)	understanding	:	:	:	unsympathetic	(36)
(37)	caring	:	:	:	disinterested	(37)
(38)	independent	:	:	:	dependent	(38)

ADD OTHER DIMENSIONS WHICH YOU THINK ARE IMPORTANT FOR AN EFFECTIVE NURSE.

(39)	----------	:	:	:	----------	(39)
(40)	----------	:	:	:	----------	(40)

Appendix B

Letter to participants.

I am a nurse working toward a master's degree in education at Brock University. For my thesis, I am interested in investigating how nurses perceive themselves as educators. You have been identified as a registered nurse who is a staff nurse or a teacher of nurses. Your participation in this study would be greatly appreciated.

The study will take place in two parts. The first part consists of a self-perception inventory (SPI-Soares Associates, 1985) that I will ask you to fill out on your own and return to me in a postage paid envelope. The SPI was specifically designed for nurses to assess how they see themselves, how they believe others see them and how others do see them. This self-perception inventory should take about forty-five to sixty minutes to complete. Please answer as honestly as you can. There are no right or wrong answers. It is your interpretations and beliefs that matter.

The second part of the study will take the form of a personal interview that will last one to two hours. This will be arranged at your convenience during the second two weeks of August, 1992. During the personal interview, you may be asked to elaborate on some of the information provided in the self-perception inventory. A tape recorder may or may not be used.

You will be asked to work from a provided list of "constructs" or a set of words or phrases that are an interpretation of your experience as a nurse and as a teacher, and are assumed to be important to you.

These constructs will be determined from the self-perception inventory you will return to me. You will compare your experience as a teacher to the list of provided constructs. Then the constructs will be ranked by you on a "most to least" type of scale. This will indicate your perception of yourself in the experience of teaching. I will help you to do this.

This is a study of and for nurses. I hope that the information obtained in the study will provide information for larger studies in order to determine how nurses see themselves as nurses, and as teachers of patients, students and colleagues.

I understand that any information disclosed by you is of a highly personal nature. It will be held in the strictest confidence. Identifying information will only be seen by me or by my advisor Dr. W. Richard Bond of Brock University, will be coded by a number and will be destroyed at the end of the study. The reporting of any anecdotal information will be accompanied by a pseudonym.

Please read the consent to participate in the study

carefully. Should you decide to participate, please return one signed consent with the completed self-perception inventory in the envelope provided by July 20, 1992. I will be in touch with you by telephone after July 20, 1992 to arrange a date for the personal interview.

Yours truly,

Deborah Holman

Appendix C

Consent to participate in the study:

Construing social dimensions of personality development: Nurses as educators.

I understand that I am being asked to participate in a study regarding nurses' perceptions of themselves as educators. The study is a two-part investigation that includes a self-perception questionnaire and a repertory grid exercise, both of which have been explained to me by the investigator, Deborah Holman, in the letter to participants.

These research tools have no documented adverse physical or mental effects. Any benefit to me is presently unknown and, if any at all, may not be apparent until the end of the study.

I understand that my identity will be protected at all times and that no one except Deborah Holman and her supervisor, Dr. W. Richard Bond of Brock University, will have access to any identifying data. This identifying data will be destroyed at the end of the study.

Any and all questions regarding the study will be

answered by Deborah Holman.

I understand that I may decline to participate or withdraw from the study at any time without prejudice.

If I wish to obtain the results of the investigation: Construing social dimensions of personality development: Nurses as educators, I may contact Deborah Holman after January, 1993, at:
2623 Colonel Court Drive, Richmond, Texas, 77469, U.S.A.
(713)239-8053.

Signed:_____

Print name:_____

Address:_____

_____

Postal Code:_____

Phone number (daytime):_____
(evenings):_____

Appendix D

Example of adapted rank-order repertory grid

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
E1	7	6	8	6	7	5	5	5	7	6	6	5
E2	6	7	5	9	10	10	8	7	5	10	10	9
E3	5	1	1	3	5	2	10	1	1	1	1	6
E4	2	2	7	5	2	6	1	6	6	5	5	3
E5	1	5	4	2	4	4	3	4	3	3	4	2
E6	4	4	3	4	1	1	4	2	4	4	3	4
E7	3	3	2	1	3	3	2	3	2	2	2	1
E8	9	9	9	10	6	7	6	9	9	8	7	7
E9	8	8	6	8	9	8	9	8	8	9	9	10
E10	10	10	10	7	8	9	7	10	10	7	8	8

Note: See page 71 for list of constructs
See page 69 for list of elements

Appendix E

Demographic data.

Name:

Age:

Gender:

Circle as many of the following as apply:

Place of employment:

- community health
- teaching hospital
- community hospital
- community college faculty
- university faculty
- community health centre
- not presently employed in nursing

Area of employment:

- education
- research
- general practice (specify area)
- specialty practice (specify area)
- management

Education level:

- hospital school of nursing
- college diploma - nursing
- college diploma - other
- baccalaureate degree - nursing

baccalaureate degree - other

post-basic baccalaureate - nursing

graduate degree - nursing (specify)

graduate degree - other (specify)

How many years have you been nursing?

Do you work part-time or full-time?

Have you ever been employed in an occupation other than nursing?

If so, what?

Have you had any formal or informal classes about learning to teach outside of your basic nursing programme?

Where?

Do you believe that your basic nursing programme valued teaching as a nursing skill?

Comment?

Did your nursing programme stress: (a) content (what should be taught) over process (how it should be taught); (b) process over content; (c) there was an even balance between content and process.

In your work setting, do you teach:

patients?

students?

peers?

others?

I do not teach.

If you have any additional information or comments, please add them here.

Appendix F

Comparison of Staff Nurses' and Nurse Educators' Responses to Demographic Questionnaire.

	Question	SN %	T %
1	Gender - female	100	100
2	Gender - male	000	000
3	Workplace: Community health	000	000
4	Workplace: Teaching hospital	080	040+
5	Workplace: community hospital	020	010
6	Workplace: community college faculty	000	080
7	Workplace: university faculty	000	010
8	Workplace: community health center	000	000
9	Not employed	000	000
10	Employed in education	000	100
11	Employed in research	000	000
12	Employed in gereral duty	000	000

Notes: SN=staff nurses; T=nurse educators; +four nurses worked here as well as teaching; ++two nurses did not answer; +++one nurse did not answer Qu. 34, 35 & 36; *one nurse had completed a hospital based nursing programme and a community college based nursing programme; **two nurses did not answer Qu. 34, 35 & 36; ***most nurses taught more than one choice in Qu. 37, 38, 39 & 40.

(appendix continues)

	Question	SN %	T %
13	Employed in specialty area	100	030+
14	Employed in management	000	020
15	Nursing education: hospital based	050*	000
16	Nursing education: college	020*	040
17	College: other	000	000
18	Nursing education: BScN	040	070
19	Baccalaureate: other	000	020
20	Post-basic baccalaureate	000	010
21	Graduate school: nursing	000	000
22	Graduate school: other	000	070
23	Work: part time	020	010
24	Work: full time	080	090
25	No previous employment	070	040
26	Previous employment	030	040++
27	Descriptive data: see text		
28	Did not learn about teaching as undergraduate	080	000

Notes: SN=staff nurses; T=nurse educators; +four nurses worked here as well as teaching; ++two nurses did not answer; +++one nurse did not answer Qu. 34, 35 & 36; *one nurse had completed a hospital based nursing programme and a community college based nursing programme; **two nurses did not answer Qu. 34, 35 & 36; ***most nurses taught more than one choice in Qu. 37, 38, 39 & 40.

(appendix continues)

Question		SN %	T %
29	Did learn about teaching as undergraduate	020	100
30	Descriptive data		
31	Undergraduate programme did not value teaching	040	010
32	Undergraduate programme valued teaching	060	090
33	Descriptive data: see text		
34	Learning re: teaching favoured content/process	020**	020+++
35	Learning re: teaching favoured process/content	030	040
36	Even split between content and process	030	030
37	Do you teach patients?	100***	080***
38	Do you teach students?	060	090
39	Do you teach peers?	060	070
40	Do you teach others?	040	020
41	Don't teach?	000	000

Notes: SN=staff nurses; T=nurse educators; +four nurses worked here as well as teaching; ++two nurses did not answer; +++one nurse did not answer Qu. 34, 35 & 36; *one nurse had completed a hospital based nursing programme and a community college based nursing programme; **two nurses did not answer Qu. 34, 35 & 36; ***most nurses taught more than one choice in Qu. 37, 38, 39 & 40.

Appendix G

Comparison of group construct scores and differences between self-perception nurse and ideal perception nurse

	Nurse Educators				Staff Nurses			
Construct Dyad	sc/n	ic/n	D	D2	sc/n	ic/n	D	D2
accepting/rejecting	15	19	4	16	14	17	3	9
approving/critical	11	16	5	25	7	13	6	36
articulate/inarticulate	16	20	4	16	9	19	10	100
cheerful/sullen	16	19	3	9	17	17	0	0
competent/incompetent	19	20	1	1	18	19	1	1
considerate/inconsiderate	18	20	2	4	20	18	-2	4
consistent/inconsistent	13	19	6	36	15	18	3	9
cooperative/uncooperative	18	19	1	1	18	18	0	0
courteous/sarcastic	18	20	2	4	19	18	-1	1
creative/imitative	16	20	4	16	11	18	7	49
democratic/autocratic	13	19	6	36	16	16	0	0
dynamic/passive	14	20	6	36	6	17	11	121
enthusiastic/indifferent	18	20	2	4	8	17	9	81
even-tempered/irritable	13	20	7	49	15	18	3	9
fair/unfair	17	20	3	9	18	18	0	0
flexible/rigid	17	20	3	9	13	20	7	49
friendly/unfriendly	18	19	1	1	17	19	2	4
humble/overbearing	10	14	4	16	13	14	1	1
industrious/lazy	17	19	2	4	16	19	3	9
informed/uninformed	15	20	5	25	12	19	7	49
just/punitive	19	20	1	1	15	19	4	16
lenient/strict	11	13	2	4	6	2	-4	16
mature/immature	19	20	1	1	17	18	1	1
neat/untidy	15	17	2	4	13	18	5	25
optimistic/pessimistic	16	19	3	9	13	17	4	16
organized/unorganized	18	20	2	4	15	20	5	25
out-going/withdrawn	16	18	2	4	11	15	4	16
patient/impatient	15	20	5	25	17	19	2	4
pleasant/unpleasant	19	18	-1	1	18	19	1	1
poised/awkward	16	19	3	9	14	19	5	25
respecting/disparaging	18	20	2	4	17	19	2	4
self-confident/insecure	15	20	5	25	12	20	8	64
sociable/shy	17	18	1	1	10	19	9	81
stimulating/dull	15	18	3	9	8	19	11	121
tolerant/intolerant	14	20	6	36	15	19	4	16
understanding/unsympathetic	16	20	4	16	17	19	2	4
caring/disinterested	19	20	1	1	17	19	2	4
independent/dependent	15	19	4	16	15	19	4	16

Appendix H

Example of Spearman's Rank Order Correlations: Staff Nurse

SN1 RHO	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
C1	-----	0.730	0.648	0.769	0.709	0.587	0.648	0.696	0.769	0.648	0.624	0.806
C2	0	-----	0.757	0.757	0.696	0.745	0.345	0.866	0.842	0.793	0.818	0.660
C3	0	0	-----	0.709	0.430	0.696	0.006	0.878	0.951	0.672	0.696	0.418
C4	0	0	0	-----	0.696	0.793	0.478	0.806	0.793	0.927	0.866	0.830
C5	0	0	0	0	-----	0.806	0.721	0.636	0.503	0.745	0.806	0.842
C6	0	0	0	0	0	-----	0.333	0.903	0.721	0.878	0.939	0.709
C7	0	0	0	0	0	0	-----	0.200	0.163	0.357	0.357	0.842
C8	0	0	0	0	0	0	0	-----	0.915	0.830	0.866	0.624
C9	0	0	0	0	0	0	0	0	-----	0.769	0.769	0.587
C10	0	0	0	0	0	0	0	0	0	-----	0.975	0.975
C11	0	0	0	0	0	0	0	0	0	0	-----	0.769
C12	0	0	0	0	0	0	0	0	0	0	0	-----

Appendix I

Relationship of constructs in

in perception of self in teaching: staff nurses

Construct	Related Construct	r_s
C_1 accepting	C_2 articulate	0.629
C_2 articulate	C_1 accepting	0.629
	C_3 competent	0.618
C_3 competent	C_2 articulate	0.618
	C_6 enthusiastic	0.593
C_4 courteous	C_{12} caring	0.677
C_5 creative	C_8 informed	0.641
C_6 enthusiastic	C_3 competent	0.593
C_7 flexible	0	
C_8 informed	C_5 creative	0.641
	C_9 organized	0.738
	C_{10} respect	0.590
C_9 organized	C_8 informed	0.738
	C_{10} respect	0.633
C_{10} respect	C_8 informed	0.590
	C_9 organized	0.633
C_{11} stimulating	0	
C_{12} caring	C_4 courteous	0.677

Note: rejection region $r_s < 0.564$

n = 10

Appendix J

Relationship of constructs in

in perception of self in teaching: nurse educators

Construct	Related Construct	r_s
C_1 accepting	0	
C_2 articulate	C_5 creative	0.654
	C_6 enthusiastic	0.586
	C_{11} stimulating	0.607
C_3 competent	C_6 enthusiastic	0.593
C_4 courteous	0	
C_5 creative	C_2 articulate	0.654
	C_6 enthusiastic	0.620
C_6 enthusiastic	C_2 articulate	0.586
	C_3 competent	0.593
	C_5 creative	0.620
C_7 flexible	C_{12} caring	0.574
C_8 informed	C_9 organized	0.713
C_9 organized	C_8 informed	0.713
C_{10} respect	0	
C_{11} stimulating	C_2 articulate	0.607
	C_{12} caring	0.570
C_{12} caring	C_7 flexible	0.574
	C_{11} stimulating	0.570

Note: rejection region $r_s < 0.564$

$n = 10$

Appendix K

Mean Relationship Scores: Staff Nurses

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Avg. C1.	0	39.68	21.77	25.06	23.04	12.44	15.42	9.932	8.044	5.586	3.174	20.00
Avg. C2.	39.68	0	38.21	14.48	17.79	21.21	12.87	29.35	20.33	18.72	9.256	16.29
Avg. C3.	21.77	38.21	0	12.35	15.42	35.27	9.036	19.89	21.10	19.78	10.47	14.76
Avg. C4.	25.06	14.48	12.35	0	6.982	23.62	16.68	7.570	12.27	21.89	9.628	45.91
Avg. C5.	23.04	17.79	15.42	6.982	0	19.68	17.58	41.11	24.21	16.68	21.10	13.13
Avg. C6.	12.44	21.21	35.27	23.62	19.68	0	5.995	17.08	21.66	31.63	24.21	24.45
Avg. C7.	15.42	12.87	9.036	16.68	17.58	5.995	0	17.08	23.62	8.963	4.655	17.18
Avg. C8.	9.932	29.35	19.89	7.570	41.11	17.08	17.08	0	54.49	34.84	25.30	21.32
Avg. C9.	8.044	20.33	21.10	12.27	24.21	21.66	23.62	54.49	0	40.18	20.77	17.18
Avg. C10.	5.586	18.72	19.78	21.89	16.68	31.63	8.963	34.84	40.18	0	17.69	17.69
Avg. C11.	3.174	9.256	10.47	9.628	21.10	24.21	4.655	25.30	20.77	17.69	0	14.21
Avg. C12	20.00	16.29	14.76	45.91	13.13	24.45	17.18	21.32	17.18	17.69	14.21	0
Summed:	184.1	238.2	218.1	196.4	216.7	237.2	149.1	278.0	263.8	233.6	160.4	222.1

Appendix L

Mean relationship Scores: Nurse Educators

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Avg. C1.	0	16.78	15.32	29.48	15.90	17.48	22.51	5.760	7.704	4.813	14.48	29.42
Avg. C2.	16.78	0	19.89	25.91	42.84	34.41	21.38	8.183	6.295	21.10	36.87	13.71
Avg. C3.	15.32	19.89	0	23.27	19.25	35.27	20.05	9.109	2.920	16.39	24.81	13.62
Avg. C4.	29.48	25.91	23.27	0	18.62	22.34	21.27	1.589	0.740	21.66	31.22	24.75
Avg. C5.	15.90	42.84	19.25	18.62	0	38.51	24.51	12.10	15.80	16.48	29.09	13.71
Avg. C6.	17.48	34.41	35.27	22.34	38.51	0	30.08	10.00	14.95	23.39	31.22	25.48
Avg. C7.	22.51	21.38	20.05	21.27	24.51	30.08	0	9.367	8.079	18.25	26.97	33.01
Avg. C8.	5.760	8.183	9.109	1.589	12.10	10.00	9.367	0	50.97	3.951	6.728	4.024
Avg. C9.	7.704	6.295	2.920	0.740	15.80	14.95	8.079	50.97	0	6.728	2.838	2.777
Avg. C10.	4.813	21.10	16.39	21.66	16.48	23.39	18.25	3.951	6.728	0	27.80	18.88
Avg. C11.	14.48	36.87	24.81	31.22	29.09	31.22	26.97	6.728	2.838	27.80	0	32.52
Avg. C12.	29.42	13.71	13.62	24.75	13.71	25.48	33.01	4.024	2.777	18.88	32.52	0
Summed:	179.6	247.4	199.9	220.8	246.8	283.1	235.5	121.7	119.8	179.4	264.5	211.9

Appendix M

SOARES ASSOCIATES
MEASUREMENT SPECIALISTS
111 TEETER ROCK ROAD
TRUMBULL, CT. 06611
U.S.A.
(203) 375-5353

31 March 1993

To Whom It May Concern:

Debbie Holman has our permission to place copies of our copyrighted measurements--specifically, "Self Concept as a Nurse" and "Ideal Concept as a Nurse"--in the Appendix of her Master's thesis.

Copies of these scales are enclosed.

Sincerely yours,

Dr. Louise M. Soares,
President

LMS/rl

Ref. Self perception Inventory/Nursing Forms:

1. Self Concept as a Nurse
2. Ideal Concept as a Nurse