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The Concept of Self in Role of Nurses Working on the Critical Care Unit as Compared to Nurses Working on the General Unit

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THE CONCEPT OF SELF IN ROLE OF NURSES WORKING ON THE CRITICAL CARE UNIT AS COMPARED TO NURSES WORKING ON THE GENERAL UNIT

by

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VITA

The author, Cheryl Mae Goldberg, is the daughter of Albert Goldberg and Lottie W. Weinstein. She was born on September 10, 1954, in Chicago, Illinois.

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CHAPTER I

INTRODUCTION

Critical care nursing has been the object of much study since its inception in the late 1950's and early 1960's (Adler, 1976). Interest in the critical care specialty has been heightened by its increasingly complex technological equipment, the hallmark of the critical care unit. Nurses on critical care units are frequently required to make many rapid decisions and actions in life and death situations. This hectic pace and demand for close attention to details are reasons why nurses choose to work on the critical care unit (Cassen & Hackett, 1975). These nurses may have unconscious feelings of helplessness and dependency. Successful intervention by the nurse on the critical care unit, in behalf of the dependent patient validates competency and intensifies feelings of omnipotence and independence (Eisendrath & Dunkel, 1979). Due to this great emphasis on technical skill, research has shown that the nurse on the critical care unit may substitute frenzied activity for intimacy, neglecting the psychosocial needs of patients (Baden & Huebsch, 1969; DeMeyer, 1967; McIntyre, 1966; Strauss, 1968).

STATEMENT OF THE PROBLEM

The purpose of this study was to answer the following research question: Is there a difference in the concept of self in role of nurses working on the critical care unit as compared to nurses working on the general unit.

STATEMENT OF THE HYPOTHESIS

It was hypothesized that: there is a statistically significant difference between the concept of self in role of the nurse working on the critical care unit and the nurse working on the general unit.

Benne and Bennis (1959) identified four forces which determine the character of the nurse's role. These four areas have been the focus of studies of the concept of self in role of nurses working on the critical care unit as compared to nurses working on the general unit. Each of the four forces has been identified along with the significant studies which have served to guide the direction of this present study.

First, there are the "official expectations that stem from the institution in which the nurse works" (Benne & Bennis, 1959, p. 196). These are the bureaucratic role behaviors. Second, are the "expectations of the nurse's immediate colleagues, subordinates, and peers working in the situation" (Benne & Bennis, 1959, p. 196). These are the professional role behaviors.

Many studies of the nurse's professional and bureaucratic role conceptualizations have been done using Corwin's (1962) tool. Benner and Kramer (1972) used Corwin's tool to compare 220 bachelor of science in nursing graduates who were working on critical care and general units, and found that the nurses working on critical care units did not have higher professional and bureaucratic role conceptualizations as was predicted. More recently, Lewandowski and Kramer (1980) sampled 213 new graduates who were working on critical care and general units also using Corwin's tool, and again found no differences in their professional and bureaucratic role conceptualizations. Differences were found however, when their scores were arranged according to the degree of specialization required by the unit. The nurses working on the most specialized critical care units showed a trend towards increasing bureaucratic role conceptualizations and decreasing professional role conceptualizations. However, a study by Bevis (1972) using a sample of 104 nurses, and also Minehan (1977) of 42 nurses, challenge Corwin's tool with regards to construct validity, the construction of individual items, and its congruence to contemporary professional values.

Other research indicates that the nurse's concept of self in role of nurse is changing, lending support to Bevis and Minehan's challenge of Corwin's tool with re-

gards to its congruence to contemporary professional values. Mauksch's (1960) longitudinal study of nursing students found that the type of person attracted to nursing was one who required greater social controls and security. Studies by Spaney (1953) of 308 nursing students, Navran and Stauffacher (1957) of 169 psychiatric nurses, and Stauffacher and Navran (1968) of 680 nursing students found they lacked dominance and autonomy. These results are supported by Davis (1969) who compared the personalities of 50 nursing and 50 social work students using Gough and Heilbrun's (1965) adjective checklist, and found the nursing students described themselves as more subordinate and dependent. However, a more recent study by Reich and Geller (1976) of 163 graduate nurses, who also used Gough and Heilbrun's adjective checklist, found these nurses described themselves as more assertive, aggressive, and self confident than the nurses in Davis's earlier study.

The third set of forces identified by Benne and Bennis (1959) are those of "reference groups outside the nurse's immediate work situation" (p. 196). Kellberg (1972) compared 30 nurses working on coronary care units and 30 nurses working on general units using reference group theory and an open ended telephone interview schedule. She found the nurse working on the coronary care unit to have a different frame of reference than the nurse

working on the general unit with respect to a higher aspiration level, requiring greater use of judgment and responsibility, and offering greater challenge. These results indicate differences which are not measured by Corwin's tool between the nurse working on the critical care unit and the nurse working on the general unit.

The fourth set of forces are the nurse's "self-expectations--her own role image of what a nurse should be and do" (Benne & Bennis, 1959, p. 196). Gentry, Foster, and Froehling (1972) investigated the psychologic response to situational stress in nurses working on critical care and general units. They used a sample of 26 nurses working on critical care units and eight nurses working on general units and compared their self concept as measured by the Tennessee Self-Concept Scale (1965). They found no differences between these two groups of nurses using this scale. However, as their study only sampled a small number of nurses working on general units, the validity of their results can be questioned.

Further study of the nurse's concept of self in role comparing the nurse working on the critical care unit and the nurse working on the general unit is clearly needed. As compared with the Gentry et al. (1972) study, this present study used a larger sample size and a different quantitative measurement tool. The instrument selected for this study was the Semantic Differential (Osgood,

Suci, & Tannenbaum, 1957) due to its ability to measure the psychosocial meaning of concepts. Subjects were asked to rate the concepts "Myself" and "Myself in the role of nurse" on a total of 24 bipolar adjective pairs, eight for each of the three independent dimensions: evaluative, potency, and activity of the Semantic Differential. These were selected from those bipolar adjective pairs which have been factor analyzed by Osgood et al. (1957) and have demonstrated the highest leadings on the evaluative, potency, and activity dimensions of meaning.

SIGNIFICANCE OF THE STUDY TO NURSING

This study provided valuable information about the conceptualization of self in role of nurses working on critical care and general units. For example, factors regarding congruence between the concepts of self and role, the socialization process required by new graduates, and the continuing needs of staff nurses working on critical care and general units were identified. This knowledge will be useful to nurse educators and nurse practitioners in curriculum development, new graduate orientation, and continuing educational programs.

DEFINITION OF TERMS

Nurse on the critical care unit. A registered staff nurse whose usual patient care assignment is on the critical care unit.

Critical care unit. Separate in-patient area of the hospital designated to provide care for adult patients

with primary medical, coronary, and/or surgical problems, and whose condition is critical or has the potential for crisis.

Nurse on the general unit. A registered staff nurse whose usual patient care assignment is on the general unit.

General unit. In-patient area of the hospital which provides care for adult patients with primary medical, coronary, and/or surgical problems, and whose condition is regarded as stable or whose prognosis would not be expected to improve on the critical care unit.

Self. Position selected by the nurse to rate the concept "Myself" on the 24 item, seven point bipolar adjective scale for the evaluative, potency, and activity dimensions of meaning.

Self in role of nurse. Position selected by the nurse to rate the concept of "Myself in the role of nurse" on the 24 item, seven point, bipolar adjective scale for the evaluative, potency, and activity dimensions of meaning.

ASSUMPTIONS

This study assumed that the Semantic Differential is a valid instrument to measure the concepts of self and self in role of nurse.

LIMITATIONS

The results of this study are limited to a population of nurses who are employed in a midwestern, urban, teaching hospital. They are further defined by their educational,

age, and cultural backgrounds. The results of this study may not be appropriately applied to a population of nurses employed in another setting, and with different demographic variables.

CHAPTER II

THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

INTRODUCTION

The theoretical framework of this study is discussed under the topic of self in role. For the review of literature, the following areas have been discussed due to their relevance to this study: self in role of nurse, the nurse working on the critical care unit, the nurse working on the general unit, and the Semantic Differential in nursing and related research.

Self in role

The theoretical framework of this study is based upon Sarbin's (1954, 1968) theory of self and role. Sarbin defines self as a quality which develops out of the individual's experiences with himself, with others, and with things. Role, he defines as actions which validate a position or status that the individual learns through interaction with others. Self and role interact to maintain the consistency of the self concept. Sarbin's (1968) research has shown individuals to be more satisfied with themselves and their performance of a role, when the actions required by the role "fit" the qualities of the

self. Conversely, self-role incongruence occurs when the actions required by the role lack this "fit". This self-role incongruence results in tension, strain, and a decrease in the level of performance of the role.

Self in role of nurse

Studies by Brophy (1959) and Pallone and Hosinski (1967) support congruence between the concept of self and role as a prerequisite necessary for adequate functioning in the nursing role. Lukens (1965) and Super (1957) also support this idea, stating that individuals choose occupational roles which are congruent with the self concept. In addition, Krall (1970) and Benner and Kramer's (1972) studies found nursing students and nurses, particularly those working in critical care areas, who were unable to integrate these two concepts left the nursing profession.

Two other studies of the nurse's concept of self and performance of the nursing role are significantly related to this present study. Dyer, Cope, Monsen, and VanDrimmelen (1972) using a sample of 1,018 nurses, investigated the relationships of various aspects of job performance to personal history, personality, and ward administrative climate. Their study found high performance nurses to have higher scores on the California Psychological Inventory scales. A later study by Dyer et al. (1975) investigated the relationships among measures of quality patient care, nurse performance, biographical, and personality data for

387 staff nurses. The results of this study support their earlier results. They found a positive correlation between nurses who describe themselves in more positive terms and high patient care performance scores.

The nurse working on the critical care unit

The critical care unit has been identified in the literature as both a source of stress and satisfaction for the nurse working on the unit. Many of the writings consist of qualitative descriptions based on impressions while observing and/or working on the critical care unit (Bilodeau, 1973; Cassem & Hackett, 1975; DeMeyer, 1967; Hay & Oken, 1972; McIntyre, 1966; Michaels, 1971; Strauss, 1968, Vreeland & Ellis, 1969; West, 1975). Some quantitative data has been obtained from the nurses working on the critical care unit through the use of a questionnaire (Cassen & Hackett, 1972; Huckabay & Jagla, 1979; Stephen & Bailey, 1979). In general, both sources of stress and satisfaction appear to be different aspects of the same variables: the patient and patient care, personnel, families, and the environment. These variables are the same for all nurses. However, they appear to be intensified for the nurse working on the critical care unit (Menzies, 1960; Michaels, 1971).

Hay and Oken (1972) describe the nurse on the critical care unit as much like the soldier in the combat zone. The nurse on the critical care unit, in the performance of

the role of nurse, is subjected to repeated threats to self-concept, due to frequent object loss. This results in a heightened sense of anxiety for the nurse (Holsclaw, 1965; Hay & Oken, 1972; Menzies, 1960). Specific sources of stress which have been identified include: guilt over actual or possible errors in judgment, intergroup conflicts, object loss due to frequent exposure to death and dying, lack of knowledge, and working with complex noisy equipment in close quarters (Bilodeau, 1973; Cassem & Hackett, 1972, 1975; DeMeyer, 1967; Hay & Oken, 1972; Huckabay & Jagla, 1979; McIntyre, 1966; Michaels, 1971; Stephen & Bailey, 1979; Strauss, 1968; Vreeland & Ellis, 1969; West, 1975).

One can then wonder, what can attract nurses to work on critical care units? Several sources of satisfaction have been identified in the literature which have relevance to this study. Specifically, nurses on the critical care unit have the opportunity to focus their efforts on patient care, the patients are challenging, and successful intervention is personally rewarding to the nurse. Working on the critical care unit requires team effort, providing the nurse with group support from other nurses, and the respect of doctors. Families are particularly receptive to nursing interventions, often expressing gratitude for what the nurse has done. The environment is also very stimulating, providing the nurse with the opportunity for many learning

experiences. Finally, there is a certain privileged status associated with working on the critical care unit, which helps bolster the self-concept of the nurse working on the critical care unit (Bilodeau, 1973; Cassen & Hackett, 1972; 1975; Eisendrath & Dunkel, 1979; Stephen & Bailey, 1979). The sources of satisfaction are the very reasons why nurses initially are attracted to work on the critical care unit and why they continue to work there.

Due to the stresses encountered on the critical care unit, investigators recommend that nurses working on these units be of a specific personality type. For example, McIntyre (1966), Meltzer (1965), and Gardam (1969) advocated the selection of nurses to work on critical care units based on their personal characteristics. The recommended personality type is one which can tolerate providing care for seriously ill patients and still maintain sensitivity to the individual.

Kilgour (1971) however, in a sample of 57 nurses from a critical care unit, found only a few differences in specific personality type as measured by the Eysench personality inventory (1964) and Cattel's sixteen personality factor questionnaire (1962). Results from this study indicated none the less, that nurses judged by their supervisors as better suited to work on the critical care unit to be more adaptable and cooperative. They also tended to have less scientific education. In addition, they were

also judged to be better able to handle crisis situations and equipment specific to the critical care unit, using greater emotional self control. Nurses judged not well suited by their supervisors to work on the critical care unit, were identified as being more self sufficient by these two personality tests.

The nurse working on the critical care unit as compared to the nurse working on the general unit

Gentry, Foster, and Froehling (1972) administered a battery of standardized psychological tests to 26 nurses working on critical care units and eight nurses working on general units. These tests included: the Tennessee Self-Concept scale, (1965), the Zung Self-Rating Depression scale (1965), the Buss-Durkee Hostility Inventory (1957), and the Minnesota Multiphasic Personality Inventory (1956), along with a questionnaire describing and rating current job satisfaction. Their results did not identify any distinctive personality patterns for the nurse working on the critical care unit. However, they found more depression, hostility, and anxiety for the nurse working on the critical care unit as compared to the nurse working on the general unit.

Benner and Kramer (1972) studied 220 Bachelor of Science Nursing graduates working on critical care and general units using Corwin's Bureaucratic and Professional Role Conceptions and Role Deprivation Test (1962) and

Kramer's Integrative Role Behavior Test (1970) over a two year period. Differences were found within the group of nurses working on the critical care units using Kramer's tool. It was concluded that many Bachelor of Science Nursing graduates choose the critical care unit to escape the professional-bureaucratic strain they found on the general unit. These nurses tended to have low scores on Kramer's tool, leaving the critical care unit and often the field of nursing for radically different jobs. Nurses with high scores on Kramer's tool tended to remain on the critical care unit, gaining a more realistic perspective of the professional-bureaucratic strain.

Lewandowski and Kramer (1980) sampled 213 new graduate nurses working on critical care and general units to investigate characteristics which may differentiate these two groups of nurses. A higher degree of self-actualization was found for the nurse working on the critical care unit, at the time of employment, as measured by the time competence and inner-directedness scales of the Personal Orientation Inventory (Klaveter & Mogar, 1967; Shostrom, 1966). However, nine months after employment, the nurses working on the general unit caught up with the self-actualization scores of the nurses working on the critical care units.

The Semantic Differential in nursing and related research

The Semantic Differential has been a useful instru-

ment in a wide variety of nursing and psychological studies. Finstuen (1977) identified 751 studies cited in Psychological Abstracts from 1952 through 1976 which employed a Semantic Differential. Eight categories of research were identified. Included in the social/psychology/personality categories were the concepts self and role. This category represented the largest number of citations (229) which was 30.49 percent of the studies identified. This study, indicating the wide usage of the Semantic Differential technique, supports the appropriateness of using this technique to investigate this research problem.

Summary

Differences between the critical care unit and general unit have been identified repeatedly in the literature. There is however, no reported research which quantifies the differences between the nurses working on the critical care unit and the nurses working on the general unit with respect to the concept of self in role of nurse. Huckabay and Jagla (1979) specifically recommend the need for further research of these variables. This study attempted to quantify the differences between these two groups of nurses using the Bemantic Differential technique.

CHAPTER III

METHODOLOGY

RESEARCH METHOD

This is a descriptive study of nurses working on critical care units and nurses working on general units. Data was collected by means of a Semantic Differential, Part I of the instrument, and a questionnaire, Part II of the instrument. Data was collected to describe these two groups of nurses so that comparisons could be made. This comparison did not however result in the full comprehension of the complex causal pathways between all of the variables (Polit & Hungler, 1978). This research method is useful as it sets the foundation for further research where there can be control over extraneous variables and manipulation of independent variables (Treece & Treece, 1977).

SAMPLE

A nonprobability sample of thirty nurses who work on critical care units and thirty nurses who work on general units were chosen for the sample of this study. The nurses work in a 500 bed urban midwestern teaching hospital. Nurses from all three shifts were asked to participate in this study. The subjects participated during their normally assigned shift at a time convenient for

the participants.

This study was presented to and approved by the Loyola University of Chicago Institutional Review Board for the Protection of Human Subjects. In addition, this study conformed to the hospital setting's procedure for the protection of human subjects. Permission to use the facility for the purpose of this research project was granted by the hospital in writing (see Appendix A).

PROCEDURE

The aim and procedures of this study were first explained by the researcher to each nurse. Subjects were given the opportunity to decline from participating. Subjects who agreed to participate were then asked to read the informed consent form (see Appendix A). Each subject who agreed to participate then signed the informed consent form. A copy of the consent form was left with each nurse who participated in this study. The researcher was available on the unit to answer any questions the subjects may have had. It was emphasized that the subject could withdraw from this study at any time.

To guarantee confidentially, the identity and answers to the instrument remain known only to the researcher. A coding system designed by the researched was used for this purpose.

NATURE OF THE DATA

Quantitative data was obtained in this study. The

data from Part I of the instrument was analyzed using inferential statistical procedures. The data from Part II was summarized through descriptive statistical procedures.

INSTRUMENT

Information for this study was obtained through a two part questionnaire (see Appendix B).

Part I.

Part I. uses the Semantic Differential technique to measure the concepts self and self in role of nurse. Subjects were asked to rate the concepts "Myself" and "Myself in the role of nurse" on a total of 24 bipolar adjective pairs, eight for each of the three independent dimensions: evaluative, potency, and activity of the Semantic Differential.

Schoon (1976) used a sample of 119 medical students, 120 business students, and 83 engineering students and concluded that all three affective dimensions: evaluative, potency, and activity of the Semantic Differential should be used when predicting occupational behavior. This study accepted this recommendation, and included these three independent dimensions of meaning of the Semantic Differential in the research instrument.

Items for the Semantic Differential used in this study were chosen from some of the items used by Friedman and Gladden (1964) in their study of eight social roles which included the concept of self. The specific items

used in this study included the following six adjective pairs: good/bad, optimistic/pessimistic, tense/relaxed, strong/weak, free/constrained, and active/passive. Other items of the Semantic Differential were selected from a review of the literature describing nursing and the characteristics of the critical care unit. In the overall selection of the specific items for the Semantic Differential, the possible interaction of scales and concepts was considered (Nunnaly, 1978). Therefore, the criteria of appropriateness was used in choosing the adjective pairs for the concepts self and role (Polit & Hungler, 1978).

A seven point scale was used for each of the items of the Semantic Differential. Each of the spaces on the seven point bipolar adjective scale was assigned a value of from one to seven. The more positive adjective received a higher score. The scores were summed and totaled. A higher score indicates a more positive concept of self and self in role of nurse with respect to these three dimensions of meaning.

Advantages of the Semantic Differential are its flexibility, ease of construction, and the variety of concepts to which it can be applied. Disadvantages are that the subjects can be confused and/or bored. This weakness may result in placement of all checks at the same position of the seven point scale. The Semantic Differential requires prior careful and detailed instructions

(Polit & Hungler, 1978). Items of the Semantic Differential for this study were randomly reversed to avoid bias tendencies (Kerlinger, 1973).

Validity

Concurrent validity for the Semantic Differential has been reported in comparison to the Thurstone attitude scale .74 to .82 (Osgood et al., 1957, p. 194), the Guttman attitude scale .78 (p. 194), and the Bogardus Social scale .72 to .80 (p. 199). The problem of determining divergent validity is addressed by Osgood et al. (1957). They suggest that with a sufficient number of factors, divergent validity could be determined. This researcher therefore chose to use 24 items when designing the Semantic Differential for this study instead of fewer items. More importantly, Osgood et al. (1957) state that the "habits of usage and association serve to refine the relatively gross differentiations of which the representational system is capable" (p. 324). More simply stated, the context in which the concept is used determines its selection. This is based on something other than demantic factors and tends to magnify the problem of establishing divergent validity.

Reliability

A pilot study was done to evaluate the test-retest reliability of the Semantic Differential instrument using a nonprobability sample of ten nurses, four who work on critical care units and six who work on general units. To

avoid contamination of the data, these were nurses who did not work at the same hospital from which the research sample was drawn. These participants consisted of a combination of nurses known to the researcher, and several nurses working at another 327 midwestern urban teaching hospital. Permission to use this facility was requested in writing (see Appendix A), and verbal permission was granted by the Director of Nursing of that institution. The pilot sample, after completing the informed consent procedure, completed the Semantic Differential on two separate occasions, two weeks apart during the month of June, 1980.

Test-retest reliability was determined using the Pearson product-moment correlation (Schmidt, 1979). This method of determining reliability was computed to determine the temporal stability of the instrument. The correlation coefficient value has a range between -1.00 to +1.00. A higher value indicates a more stable instrument. A value of .70 or higher is generally considered an acceptable level of test-retest reliability for social or psychological instruments (Polit & Hungler, 1978).

The Pearson correlation coefficient values for the pilot were computed. These values, along with the mean and standard deviation for each of the items of the Semantic Differential for both the pilot and sample were also computed (see Appendix C). For the concept "Myself" a

value of +0.85 was obtained. For the concept "Myself in the role of nurse" however, only a value of +0.44 was obtained, indicating instability of this concept over time. Further statistical analysis of the concepts identified inconsistencies in the Pearson Correlation values. For the concept "Myself" a high Pearson correlation value was obtained for the evaluative and activity scores, and a low value for the potency scores. For the concept "Myself in the role of nurse" a high positive Pearson correlation value was obtained for the activity score, while the evaluative and potency scores were low.

Coefficient alpha, also known as Cronbach's alpha (Cronbach, 1951), a measure used to evaluate reliability, was also computed for the items of the Semantic Differential for the pilot and sample groups (see Appendix C). The coefficient alpha statistic also contributes to the validity of the items as it measures both equivalence and homogeneity. Coefficient alpha, which is used when the data is not dichotomous, is equivalent to the Kuder-Richardson formula 20. It determines the inter-item consistency of the subject's responses to all of the items in the Semantic Differential (Nunnaly, 1978). Both the alpha and standardized alpha, related scores are reported. Each item was standardized by dividing it by the standard deviation of the item (Specht & Bubolz, 1979).

Frequently, items in a seven point Semantic Differ-

ential scale have a coefficient alpha of .80 (Nunnaly, 1978, p. 612). The calculated coefficient alpha for the total items in the pilot ranged from .85 to .90, and from .62 to .87 for the sample.

Part II.

Part II of the instrument consists of a questionnaire designed by the researcher to obtain demographic data (see Appendix B). This includes information about educational preparation, age, and work experience. In addition, three questions relating to job satisfaction were also asked. These questions are similar to those asked in the Gentry et al. (1972) study. Responses to these three questions were recorded on an ordinal scale ranging from "very much so" to "not at all."

The advantage of this instrument is its ease in obtaining data, conservation of the researcher's and subject's time, low distribution cost, ease in tabulation, and anonymity of respondents. Disadvantages in the instrument are its inability to probe a topic in depth, subjects may omit items without explanation, some questions may force a subject to answer according to the available choices, not according to actual choice, limitation of the data to that which is voluntarily supplied, misunderstanding of items, and subjects that do not return the questionnaire who may make the sample no longer representative of the population (Treece & Treece, 1977).

The pilot study was done to determine test-retest reliability, internal consistency, and to determine and correct problems with the instrument and/or any aspects of the research methodology. It was decided that no changes in the instrument or research methodology were to be made. This instrument took approximately ten to 15 minutes for the subjects to complete.

CHAPTER IV

DATA ANALYSIS

INTRODUCTION

Data from 30 nurses working on critical care units was collected over a two day period during June, 1980. Data from 30 nurses working on general units was collected two weeks later, also over a two day period during June, 1980.

The data obtained from Part I of the instrument was divided into its three dimensions: evaluative, potency, and activity. Each of the seven bipolar blanks was given a score from one to seven. The positively worded adjective was given the higher score. A score was obtained for each of the dimensions and added together for a total score. Computer services were used to analyze the data. a *t* test was computed to determine the statistical significance between the Semantic Differential scores of the three dimensions for each of the two concepts and the two groups of nurses. The .05 level of significance was set.

The descriptive data of Part II of the instrument was summarized in frequency distributions. Educational preparation and work experience are nominal level data, which

were categorized and tallied. Age and length of experience, interval level data, were grouped and tallied. Answers to the questions regarding job satisfaction and choice of nursing unit represent ordinal level data. The responses to the questions regarding job satisfaction ranged from "very much so" to "not at all", and were assigned a value of from one to four respectively. These results were tallied and compared. Answers to the question regarding choice of unit were arbitrarily assigned a value, critical care unit a value of one and general unit a value of two. These results were tallied and compared.

The Pearson product-moment correlation was computed for the data obtained in Part II of the instrument in order that comparisons could be made between the nurse working on the critical care unit and the nurse working on the general unit (Schmidt, 1979). The .05 level of significance was set.

RESULTS OF PART I.

Semantic Differential for the concept "Myself"

The data obtained for the concept "Myself" from the nurses working on the critical care unit and the nurses working on the general unit is shown in Table 1. Mean scores for the three dimensions of the Semantic Differential and a grand mean were first obtained.

For the nurses working on the critical care unit, one item was missing from the evaluative dimension, and

Table 1

Semantic Differential Scores for the Concept "Myself"

	Number of Subjects	Mean	Standard Deviation	t Value	Degrees of freedom	Two tailed probability
Evaluative score						
Critical care	29	47.69	4.87	-0.67	56	0.503
General unit	29	48.62	5.62			
Potency score						
Critical care	30	36.30	3.72	-0.25	54	0.772
General unit	26	36.65	5.31			
Activity score						
Critical care	30	39.40	5.74	-1.37	57	0.176
General unit	29	41.38	5.36			
Total score						
Critical care	29	123.45	11.26	-1.27	51	0.211
General unit	24	127.42	11.49			

therefore, the mean was computed for 29 instead of 30 cases. For the nurses working on the general unit, one item was missing from the evaluative dimension, four from the potency dimension, and one from the activity dimension. The mean scores were therefore computed for 29, 26, and 29 cases respectively.

The mean scores for the evaluative dimension were highest for both groups of nurses. These scores were followed by the activity scores which ranked second, and the potency scores which ranked third.

The mean scores overall were higher for the nurses working on the general unit than the mean scores of the nurses working on the critical care unit. The parametric procedure to test differences between group means is the *t* test (Polit & Hungler, 1978). A *t* test was therefore computed of the pooled variance estimate, comparing the mean scores of the nurses working on the critical care unit and the nurses working on the general unit. These differences however were not found to be statistically significant at the .05 level.

Semantic Differential for the concept "Myself in the role of nurse"

The data obtained for the concept "Myself in the role of nurse" from the nurses working on the critical care unit and the nurses working on the general unit is shown in Table 2. Mean scores for the Semantic Differen-

Table 2

Semantic Differential Scores for the Concept "Myself in the role of nurse"

	Number of Subjects	Mean	Standard Deviation	t Value	Degrees of Freedom	Two tailed probability
Evaluative score						
Critical care	30	47.47	6.33	-1.12	56	0.267
General unit	28	49.43	7.00			
Potency score						
Critical care	29	36.03	5.00	-1.10	53	0.277
General unit	26	37.77	6.67			
Activity score						
Critical care	30	40.63	4.62	-1.44	57	0.156
General unit	29	42.69	6.27			
Total score						
Critical care	29	129.90	14.04	-1.14	52	0.258
General unit	25	128.60	16.18			

tial "Myself in the role of nurse" were computed first.

For the nurse working on the critical care unit, one item was missing from the potency dimension, and the mean was therefore computed for 29 cases. No items were missing from the evaluative and activity dimensions. For the nurse working on the general unit, there were two missing items from the evaluative dimensions, four from the potency dimension, and one from the activity dimension. The mean scores were computed for 28, 26, and 29 cases respectively.

Again, as for the concept "myself," the mean scores for the evaluative dimension ranked highest. Activity scores ranked second, followed by potency scores which ranked third.

The mean scores overall were higher for the nurses working on the general unit as compared to nurses working on the critical care unit. A *t* test was then computed of the pooled variance estimate comparing the mean scores of the nurses working on the general unit. These differences however, were also found not to be statistically significant at the .05 level.

Semantic Differential for the concepts "Myself" and "Myself in the role of nurse" for the nurse working on the critical unit

A *t* test was also computed comparing the mean Semantic Differential scores of the concepts "Myself" and "Myself in the role of nurse" for the nurse working on the

critical care unit and the nurse working on the general unit.

The data for the nurse working on the critical care unit is shown on Table 3. For the evaluative and potency dimensions the mean score for the Semantic Differential for the concept "Myself" is greater than for the concept "Myself in the role of nurse." For the potency dimension, and total score, the mean value for the concept "Myself in the role of nurse" is greater than that of the concept "Myself." However, the results of a t test comparing these means, did not find the difference between these means to be statistically significant at the .05 level.

Semantic Differential for the Concepts "Myself" and "Myself in the role of nurse" for the nurse working on the general unit

The data for the nurse working on the general unit is shown on Table 4.

For the nurse working on the general unit the mean scores for the evaluative, potency, and activity dimensions and the total score for the concept "Myself in the role of nurse" was greater than the mean scores for the concept "Myself." However, as with the nurse working on the critical care unit, the t test comparing these means was not found to be statistically significant at the .05 level.

Table 3

The Nurse Working on the Critical Care unit-Semantic Differential for the Concepts "Myself" and "Myself in the role of nurse"

	Number of Subjects	Mean	Standard Deviation	t Value	Degrees of Freedom	Two tailed probability
Evaluative score						
Myself	29	47.69	4.87	-0.32	28	0.753
Role of nurse		47.41	6.43			
Potency score						
Myself	29	36.10	3.63	-0.10	28	0.924
Role of nurse		36.03	5.00			
Activity score						
Myself	30	39.40	5.74	1.59	29	0.123
Role of nurse		40.63	4.62			
Total score						
Myself	28	123.36	11.45	0.26	27	0.799
Role of nurse		123.82	14.29			

Table 4

The Nurse Working on the General unit-Semantic Differential for the Concepts "Myself" and "Myself in the role of the nurse"

	Number of Subjects	Mean	Standard Deviation	t Value	Degrees of Freedom	Two Tailed Probability
Evaluative score						
Myself	28	49.00	5.33	0.60	27	0.551
Role of nurse		49.43	7.00			
Potency score						
Myself	25	36.49	5.34	0.59	24	0.563
Role of nurse		37.16	6.02			
Activity score						
Myself	28	41.71	5.13	1.05	27	0.304
Role of nurse		42.61	6.37			
Total score						
Myself	23	126.83	15.55	0.16	22	0.872
Role of nurse		127.22	11.36			

Pearson correlation coefficient for the Semantic Differential for the concepts "Myself" and "Myself in the role of nurse" for the nurse working on the critical care unit and the nurse working on the general unit

No statistically significant differences were identified between the concepts "Myself" and "Myself in the role of nurse" for either the nurse working on the critical care unit or the nurse working on the general unit. Further statistical analysis of the data was done to investigate the nature of the relationship between the concepts "Myself" and "Myself in the role of nurse." A Pearson correlation was computed to compare each of the 24 items of the concept "Myself" with the concept "Myself in the role of nurse" (see Tables 5 and 6).

For the nurse working on the critical care unit, the following adjective pairs have a Pearson correlation coefficient statistically significant at the .05 level: tense/relaxed, strong/weak, deep/shallow, clean/dirty, and valuable/worthless. The following adjective pairs have a Pearson correlation coefficient significant at the .001 level: active/passive, excitable/calm, tenacious/yielding, positive/negative, serious/humorous, meaningful/meaningless, intentional/unintentional, opaque/transparent, constrained/free, fast/slow, complex/simple, severe/lenient, hot/cold, and small/large. The following adjective pairs have a Pearson correlation coefficient which is not statistically

Table 5

Pearson correlation coefficient for the concepts "Myself" and "Myself in the role of nurse" for the nurse working on the Critical Care unit

Adjective Pairs	Pearson Correlation Coefficient
Active/Passive	0.62[b]
Low/High	0.02[a]
Tense/Relaxed	0.38[a]
Strong/Weak	0.36[a]
Deep/Shallow	0.33[b]
Excitable/Calm	0.65[b]
Tenacious/Yielding	0.89[b]
Progressive/Regressive	0.12
Positive/Negative	0.83[b]
Serious/Humorous	0.65[b]
Meaningful/Meaningless	0.64[b]
Clean/Dirty	0.37[a]
Good/Bad	0.39[a]
Optimistic/Pessimistic	0.22
Intentional/Unintentional	0.58[b]
Opaque/Transparent	0.64[b]
Constrained/Free	0.65[b]
Fast/Slow	0.57[b]
Complex/Simple	0.61[b]
Severe/Lenient	0.73[b]
Hot/Cold	0.56[b]
Valuable/Worthless	0.32[a]
Small/Large	0.80[b]
Unimportant/Important	-0.01

Note. Number of subjects = 28.

[a] $p < .05$

[b] $p < .001$

Table 6

Pearson correlation coefficient for the concepts "Myself" and "Myself in the role of nurse" for the nurse working on the General unit

Adjective Pairs	Pearson correlation coefficient
Active/Passive	0.65[b]
Low/High	0.08
Tense/Relaxed	0.13
Strong/Weak	0.50[a]
Deep/Shallow	0.31
Excitable/Calm	0.32[a]
Tenacious/Yielding	0.70[b]
Progressive/Regressive	0.56[b]
Positive/Negative	0.61[b]
Serious/Humorous	0.45[a]
Meaningful/Meaningless	0.45[a]
Clean/Dirty	0.53[b]
Good/Bad	0.88[b]
Optimistic/Pessimistic	0.45[a]
Intentional/Unintentional	0.76[b]
Opaque/Transparent	0.77[b]
Constrained/Free	0.33[a]
Fast/Slow	0.68[b]
Complex/Simple	0.60[b]
Severe/Lenient	0.71[b]
Hot/Cold	0.83[b]
Valuable/Worthless	0.81[b]
Small/Large	0.63[b]
Unimportant/Important	0.15

Note. Number of subjects = 30.

[a] $p < .05$

[b] $p < .001$

significant: low/high, progressive/regressive, optimisitc/pessimistic, and unimportant/important. Of the 24 adjective pairs, 20 are significant beyond the .05 level, with 14 of these beyond the .001 level.

For the nurse working on the general unit, the following adjective pairs have a Pearson correlation coefficient statistically significant at the .05 level: strong/weak, excitable/calm, serious/humorous, meaningful/meaningless, optimistic/pessimistic, and constrained/free. The following adjective pairs have a Pearson correlation coefficient significant at the .001 level: active/passive, tenacious/yielding, progressive/regressive, positive/negative, clean/dirty, good/bad, intentional/unintentional, opaque/transparent, fast/slow, complex/simple, severe/lenient, hot/cold, valuable/worthless, and small/large. The following adjective pairs have a Pearson correlation coefficient which is not statistically significant: low/high, tense/relaxed, deep/shallow, and unimportant. Of the 24 adjective pairs, 20 are significant beyong the .001 level.

RESULTS OF PART II

Type of nursing unit

Answers to the questions in this section of the instrument identified the demographic characteristics of the nurses who participated in this study. Regarding the type of nursing unit, for the nurse working on the critical

care unit, the sample consisted of six nurses from the medical intensive care unit, nine from the intensive coronary care unit, and 15 from the surgical intensive care unit. The nurse working on the general unit consisted of 13 nurses from the general medical unit, 12 nurses from the general surgical unit, and five nurses from the cardiac stepdown unit.

Work shift

When questioned about work shift the following data was obtained. The sample of nurses working on the critical care unit consisted of 12 nurses working the seven a.m. to three p.m. shift, nine nurses working the three p.m. to eleven p.m. shift, and nine nurses working the eleven p.m. to seven a.m. shift. The sample of nurses working on the general unit consisted of 26 nurses working the seven a.m. to three p.m. shift, three nurses working the three p.m. to eleven p.m. shift, and one nurse working the eleven p.m. to seven a.m. shift. A Pearson correlation correlation coefficient computed comparing these two groups of nurses with respect to work shift has a value of -0.48 which is highly significant, $p < .0001$. This difference reflects a difference in staffing patterns of the critical care unit as compared to the general unit. The critical care unit has a more even distribution of nurses working over all three shifts. The general unit however, has a greater concentration of nurses working during the seven a.m. to

three p.m. shift, when there is an increased patient need of nursing care.

Work status

The majority of nurses in this sample have a full-time work status. Of the nurses working on the critical care unit, 28 are employed full-time, and only two are employed part-time. The sample of nurses working on the general unit consisted of 26 full-time nurses, and four part-time nurses.

Age distribution

A total number of nurses was obtained for each of the predetermined categories of age as indicated on the questionnaire (see Appendix B). The age categories begin at 18 years and continue through 62 years of age. Each category covers a five year time span. The ages of the nurses working on the critical care unit range from 18 years to 52 years old. The greatest number of nurses working on the critical care unit fell in the category ranging from 28 to 32 years old. The ages of the nurses working on the general unit range from 18 to 62 years old. The greatest number of nurses was in the category of from 23 to 27 years old. A Pearson correlation coefficient .01 was obtained when these two groups of nurses were compared with respect to age. It was concluded that there is no statistically significant difference, $p > .47$, between the ages of these two groups of nurses.

Educational preparation

The educational preparation of the nurses working on the critical care unit consisted of the following: one nurse with an associate degree, seven from a diploma program, 23 with bachelor of science in nursing preparation, two with a bachelor degree in a field other than nursing, two with some college, and no master degree prepared nurses. The educational preparation of the nurses working on the general unit consisted of the following: two nurses with an associate degree, ten from a diploma program, 17 with bachelor of science in nursing preparation, one with a bachelor degree in a field other than nursing, five with some college, and two master degree prepared.

A Pearson correlation coefficient was computed comparing the educational preparation of these two groups of nurses. The only difference approaching statistical significance was for the number of bachelor of science in nursing prepared nurses working on the critical care unit as compared to the number of bachelor of science in nursing prepared nurses working on the general unit. This difference computed to a Pearson r value of -0.21, with a significance of $p < .06$.

Time in present position

A total amount of time spent in this present position was obtained through the use of predetermined categories on the questionnaire. The categories begin at less than

six months and span to a period of over five years. A total number of nurses was computed for each time category.

The nurse working on the critical care unit had worked at that present position for a time period ranging from less than six months to over five years. The largest number of nurses, 14, reported to have worked at their present position from two to five years. The rest of the nurses were divided almost evenly over the rest of the time range indicated on the questionnaire.

The nurse working on the general unit also had worked at that present position for a time ranging from less than six months to over five years. The largest number of nurses in this sample, nine, reported to have worked at their present position from six months to twleve months. An equal number of nurses, seven, reported working at their present position from one to two years and over five years. The remaining nurses were divided almost evenly over the two remaining categories. When Pearson correlation coefficients were computed for this data, no statistically significant differences were found with respect to length of time worked in this present position.

Expectations

The question: "Has this job met your expectations?" was answered by the nurse working on the critical care unit in the following manner: three reported "very much so," 23 "moderately," one "slightly," and two "not at all."

Pearson correlation coefficients comparing this data did not support statistically significant differences with respect to expectations being met by this job.

Satisfaction

The question: "Are you satisfied in your present position?" was answered by the nurse working on the critical care unit in the following manner: three "very much so," 23 "moderately," one "slightly," and two "not at all." The nurse working on the general unit answered this question with the following responses: eight "very much so," 17 "moderately," four "slightly," and one "not at all." A Pearson correlation coefficient comparing this data did not support a statistically significant difference with respect to satisfaction in this present position.

Change

The question: "Have you considered finding a different position?" was answered by the nurse working on the critical care unit in the following manner: four "very much so," eight "moderately," 12 "slightly," and four "not at all." The nurse working on the general unit answered this question with the following responses: ten "very much so," five "moderately," six "slightly," and nine "not at all." A Pearson correlation coefficient comparing this data did not support a statistically significant difference with respect to considering finding a new

position.

Time in nursing

A total amount of time that the subject had worked as a nurse was obtained using predetermined time categories on the questionnaire. The categories begin at less than six months and span to a period of over five years. A total number of nurses was obtained for each time category.

The nurse working on the critical care unit had spent from six months to over five years in nursing. Two of these nurses had worked from six months to twelve months, none from over one year to two years, four from over two years to five years, and 23 for over five years. The nurse working on the general unit had also spent from six months to over five years working as a nurse. One of these nurses had worked from six months to twelve months, three from over one year to two years, ten from over two years to five years, and 16 for over five years.

A Pearson r value of -0.18 with a significance of $p < .09$, approached the level of statistical significance. This indicates a tendency for the nurse working on the critical care unit to have spent a longer period of time working as a registered nurse than the nurse working on the general unit.

Other work experience as a registered nurse

Both the nurse working on the critical care unit and the nurse working on the general unit reported a wide

variety of other work experience as a registered nurse. Of the nurses working on the critical care unit, 17, reported other work experience in medical intensive care, while only five nurses working on the general unit reported this other work experience. This is a statistically significant difference, Pearson $r = -0.45$, $p < .0005$.

The nurses working on the critical care unit reported that eleven had had other work experience in intensive coronary care. Three nurses working on the general unit reported other work experience in intensive coronary care. A Pearson r value of -0.32, was statistically significant, $p < .007$.

The nurse working on the critical care unit reported that 18 had had other work experience in surgical intensive care. Three nurses working on the general unit reported other work experience in surgical intensive care. A Pearson r value of -0.52 was highly significant, $p < .00001$.

Psychiatric, pediatric, general medical, general surgical, cardian step-down, obstretical and gynecological, and no other work experience was reported almost equally by both groups of nurses. A Pearson correlation computed to compare these experiences did not identify a statistically significant difference.

In general it can be concluded that the nurse working on the critical care unit had other experience on the general unit and critical care unit. The nurse

working on the general unit tended not to have other work experience on the critical care unit.

The only area of difference for the nurse working on the critical care unit was the area of other work experience where participants wrote in answers eg. emergency room and public health. This area was reported by seven nurses working on the critical care unit and 12 nurses working on the general unit. This difference had a Pearson r value of .18 which approached statistical significance, $p < .09$.

Positions other than staff nurse

The nurse working on the critical care unit indicated the following other positions to include: four as assistant head nurse, one as head nurse, eight as supervisor, seven in teaching, nine in some other position, and four with no other position other than staff nurse. The nurse working on the general unit indicated the following other positions to include: three as assistant head nurse, one as head nurse, four as supervisor, five in teaching, 13 in some other position, and eight with no position other than staff nurse. A Pearson correlation coefficient comparing this data did not support a statistically significant difference with respect to positions other than staff nurse.

Choice of work on the critical care or general unit

The question: "If given the choice of always working

on general unit or critical care unit, which would you choose?" was answered by the nurse working on the critical care unit in the following manner: 29 chose critical care and one chose the general unit. The nurse working on the general unit gave the following responses: six chose critical care and 24 chose the general unit. This difference has a Pearson r value of -0.78, which is highly significant, $p < .00001$. The nurses working on the critical care unit would chooose work on the critical care unit, while the nurses working on the general unit would choose working on the general unit.

DISCUSSION

The overall results failed to show a statistically significant difference in the concept of self in role of the nurse working on the critical care unit as compared to the nurse working on the general unit. The null hypothesis which states that there is no statistically significant difference between the concept of self in role of the nurse working on the critical care unit and the nurse working on the general unit was therefore not rejected.

In implementing this research study, several variables came to light which were unanticipated during the proposal stage, and not encountered during the pilot stage of this research study. These variables could very possibly have directly effected the overall results of this

study.

Specifically, the influence of culture and language became evident while instructing and observing participants completing the instrument. A large number of foreign nurse graduates were observed to be working on the critical care unit. It was these nurses who were also observed to frequently ask questions regarding the meaning of specific adjective pairs used in the Semantic Differential. Most frequently these were the adjective pairs tenacious/yielding, and opaque/transparent. Nurses working on the general unit were not observed to have these same questions regarding the meaning of these adjective pairs. These observations of course do not control for the nurses who for a variety of reasons chose not to ask questions regarding the meaning of specific adjective pairs, and either guessed or left the answer blank.

Cultural and language differences of foreign nurses had been supported in the literature. Spessard (1971) focused on the Thai nurse in her descriptive study of 40 nurses and 15 of their supervisors who had come to the United States for employment. She concluded that these nurses had retained their Thai cultural biases in the United States. She specifically recommended the need for an orientation program to improve conversational English language skill, and to educate these nurses in

the area of American cultural norms in order to avoid ministerpretation by these Thai nurses.

These conclusions are supported by Dhillen (1976) and a study by Davitz, Davitz, and Sameshima (1976) who interviewed 95 female nurses from 21 foreign nations, identifying differences for the foreign nurses in the following areas: emphasis on bedside nursing, language, loyalty and respect to the hospital and to patients, clinical and administrative roles, and attitudes towards death and the elderly. In the area of language, even the English speaking foreign nurses in this study reported difficulty in understanding and interpreting American accents and the semantic differences of the English language as it is spoken in the United States.

Another study by Aquino, Trent, and Deutsch (1979) to investigate factors related to foreign nurse graduates' test-taking performance also has some relevance to the results of this present study. Subjects in their study included 146 foreign nurse graduates participating in a workshop to prepare for state board examinations. Competency in English was measured by the Test of English as a Foreign Language (TOEFL) (1973). The mean score for TOEFL for the first group of participants was 468.97, and 492 for the second group. Both scores are slightly lower than the mean total score of 500 established by the Educational Testing Service in 1964. These results raise

questions regarding the English proficiency of foreign nurse graduates.

The Semantic Differential (Osgood, et al. 1957) has been studies using sample populations with different cultural and language backgrounds (Kumata & Schramm, 1956; Kumata, 158; Miron, 1961; Osgood, 1962; Trinidis & Osgood, 1958). These studies support the cross cultural generality of the three dimensions: evaluative, potency, and activity of the Semantic Differential Technique. However, another study by Tanaka, Oyama and Osgood, (1963) which used a sample of 108 Japanese and 67 American female college students demonstrated the existance of scales that are factorially stable across concept classes, scales that are factorially unstable across concept classes but stable across subject groups, and scales that are factorially unstable with respect to concept class and subject group interactions. This demonstration of cross-cultural uniqueness raises questions regarding the validity of the items of the Semantic Differential for the foreign nurses who participated in this study. Another variable for consideration is that though these foreign nurses are bilingual, the Semantic Differential instrument was completed in English, rather than in their native language, and may have also had influence on their responses.

A final area which must be considered when investigating the failure of this study to demonstrate differences

between the concept of self in role of the nurse working on the critical care unit as compared to the nurse working on the general unit, is concerned with the theoretical framework of this study. This failure may be due to the fact that the forces which determine the differences between the nurse working on the critical care unit as compared to the nurse working on the general unit may be those of reference group theory as demonstrated by Kellberg (1972) and not those of professional or beaucratic role conceptualizations (Benner & Kramer, 1972; Lewandowski & Kramer, 1980), or self expectations or role (Benne & Bennis, 1959). Further study of these forces is needed to provide information on the influence of these forces upon the role of the nurse.

The results of the Pearson correlation coefficient between the concepts "Myself" and "Myself in the role of nurse" provide interesting information on the concept of self in role for the nurse working on the critical care unit and the nurse working on the general unit. A Pearson correlation coefficient statistically significant for the specific items of the Semantic Differential for the concepts of self and role provides evidence for self-role congruence. A Pearson correlation coefficient not statistically significant can be interpreted to indicate self-role incongruence (Sarbin, 1968).

Both groups of nurses had 20 of the items of the Semantic Differential with statistically significant Pearson correlation coefficients. Similarities were found for the adjective pairs statistically significant at the .05 level. This included the adjective pair: strong/weak. Similarities were also found for the adjective pairs statistically significant at the .001 level. This included the adjective pairs: active/passive, tenacious/yielding, positive/negative, intentional/unintentional, opaque/transparent, fast/slow, complex/simple, severe/lenient, hot/cold, and small/large. This can be interpreted to mean that there is self-role congruence for both the nurse working on the critical care unit and the nurse working on the general unit. These results are significant as Sarbin's (1968) research has shown that individuals whose actions required by the role "fit" the qualities of the self are found more satisfied with themselves and their performance of the role.

Also, of interest were the items which both groups of nurses had a Pearson correlation coefficient not statistically significant. Both groups were found to have the adjective pairs low/high, and unimportant/important not statistically significant. The nurse working on the critical care unit had the adjective pairs progressive/regressive, and optimistic/presimistic not statistically significant. The nurse working on the

general unit had the adjective pairs tense/relaxed, and deep/shallow also not statistically significant.

Finally, the results of this study need to be considered along with those of Benner & Kramer (1972). This study identified a tendency for the nurse working on the critical care unit to have spent a longer time in nursing, to have had other work experience on critical care units and to choose work on the critical care unit. Nurses in Benner and Kramer's (1972) study who were unable to balance professional and bureaucratic role behaviors left the critical care area and the profession of nursing. It can be concluded that the nurses in this study who were working on the critical care unit were able to satisfactorily find a balance between the forces which determine the nurse's role and had remained nurses and had continued to work on the critical care unit. Another similarity with the results of Benner and Kramer's (1972) study is the finding that there was a tendency for the bachelor of science in nursing prepared the nurse to choose work on the critical care unit. Nurses in Benner and Kramer's (1972) study reported that they felt that the critical care unit was the place where they could deliver the personalized nursing care that they had been taught in their nursing school program.

CHAPTER V

CONCLUSIONS

SUMMARY

A review of the previous research done on the concept of self in role of the nurse working on the critical care unit as compared to the nurse working on the general unit has identified differences for these nurses with respect to reference group (Kellberg, 1972), but no differences with respect to professional and bureaucratic role behaviors (Benner & Kramer, 1972; Lewandowski & Kramer, 1980). This present study compared the nurse working on the critical care unit with the nurse working on the general unit with respect to self expectations.

The concepts of self and role were measured using the Semantic Differential technique. Thirty nurses who worked on critical care units and thirty nurses who worked on general units completed a Semantic Differential for the concepts "Myself" and "Myself in the role of nurse," and a questionnaire to obtain demographic data.

A *t* test comparing the mean value for the concept "Myself" for the nurse working on the critical care unit with the concept "Myself" for the nurse working on the

general unit failed to identify a statistically significant difference. A *t* test comparing the mean value for the concept "Myself in the role of nurse" for the nurse working on the critical care unit with the concept "Myself in the role of nurse" for the nurse working on the general unit also failed to identify a statistically significant difference. The null hypothesis which states that there is no difference between the concept of self in role of the nurse working on the critical care unit and the nurse working on the general unit was not rejected.

Further analysis compared the mean values for the concept "Myself" with the concept "Myself in the role of nurse" for the nurse working on the critical care unit, and the nurse working on the general unit, respectively. A *t* test comparing these means also failed to identify statistically significant differences.

Next, a Pearson correlation coefficient was computed comparing the mean values of the individual items of the Semantic Differential for the concept "Myself" with the concept "Myself in the role of nurse" for the nurse working on the critical care unit and the nurse working on the general unit. Overall, there was a large number of adjective pairs with Pearson correlation coefficients statistically significant for both the nurses working on the critical care unit and general unit. Only four adjective pairs for each group had Pearson correlation

coefficients which were not statistically significant.

In comparing the demographic data, differences were noted for the nurse working on the critical care unit who tended to have spent a longer time in nursing, to have other work experience on critical care units, and to have Bachelor of Science Nursing educational preparation.

Differences were also found in the choice of nursing unit. The nurse working on the critical care unit, when given the choice of working on the critical care unit or general unit chose to work on the critical care unit. The nurse working on the general unit, when given the choice of nursing unit, chose the general unit.

IMPLICATIONS

It is recalled that congruence between the concept of self and role is a prerequisite necessary for adequate functioning in the nursing role (Brophy, 1959; Pallone & Hosinski). The results of this study however, found congruence between the concept of self and role when these concepts were compared item by item.

These results have important implications for nursing today and nursing in the future. Specifically, the areas of socialization of nurses into the role of nurse, nursing education, and nursing practice need ongoing evaluation in order to continue to support self-role congruence of nurses.

First, the socialization of nursing students and

nurses, when the concept of self as nurse is developed needs to be carefully considered. It begins with the nurse's experiences which serve as a feedback mechanism, presenting a picture of self as nurse. This concept of self as nurse ultimately reflects upon and influences the nurse's professional behavior. Cognitive integration of the concept of self by the nurse may result in a self fulfilling prophecy. The nurse who sees herself as a second rate professional will imprint this message on her concept of self as nurse (Bush & Kjervik, 1979). This is especially important as the concept of self directly effect patient care. Studies by Dyer et al. (1975) have shown that nurses with a more positive self concept were rated by supervisors, peers, and patients as giving better patient care than nurses with negative self concepts.

Second, nurse educators need to consider their own self image and its influence in the socialization of student nurses. Practicing nurses need to reflect on their own self image as nurses, in that it directly effects their practice and the self image of other nurses (Jourard, 1971).

Third, the nurse needs to progress from this step of greater self awareness to one where abilities and importance are no longer underrated (Bush & Kjervik, 1979). Assertiveness training is one means which has been

demonstrated by foreign nurse graduates (Aquine et al., 1979; Davitz et al., 1976; Dhillon, 1976; & Spessard, 1971). Although the group of foreign nurse graduates who participated in this study achieved a level of English competency suggicient to pass State Board of Nursing Examinations, they had difficulty with the semantic meaning of words used in this study. This semantic problem should be considered when planning continuing educational programs for foreign nurse graduates.

RECOMMENDATIONS

It is suggested that future study begin by considering first the reliability and validity of the Semantic Differential technique. Test-retest reliability of the instrument may be improved by the following methods: decreasing the amount of time between the test and retest procedures and/or omitting items with low test-retest reliability. In addition, the internal consistency of the Semantic Differential may be increased by omitting from the Semantic Differential those items with low coefficient alpha values.

The variables of culture and language and their influence on the answers to the Semantic Differential need to be investigated. Administering the instrument to a nurse population with different demographic variables may reduce the influence of culture and language on the values of the Semantic Differential. Further study on a

different population of nurses, perhaps in a different setting is therefore recommended. Including items which obtain information regarding culture and language need to be included in the questionnaire portion of the instrument when repeating this study.

In a further study, one could use a larger sample size and compare the Semantic Differential scores for the nurses working on the critical care and general units with regards to bachelor of science in nursing educational preparation, and also length of time worked as a registered nurse.

Several studies have been done comparing nurses working on different types of nursing units to identify personality characteristics differentiating the nurses working on those units. Navran and Stauffacher (1958) compared psychiatric with nonpsychiatric nurses, and Lentz and Michaels (1959) medical with surgical nurses. Studies of graduate nursing students were done by Lukens (1965) comparing psychiatric with medical-surgical nurses, by Miller (1965) of medical-surgical, maternal-child, psychiatric, and public health nurses, and Gilbert (1975) medical-surgical with psychiatric nurses. These studies provide some evidence for personality differences for nurses working on different types of nursing units. Using a larger sample size would allow for the comparison of the Semantic Differential scores for the nurses working

on the medical, surgical, and coronary critical care units with the nurses working on the medical, surgical, and cardiac step-down units.

In addition, further study to investigate other forces, professional, bureaucratic, and reference group theory, along with self expectations as they influence the concept of self in role of the nurse working on the critical care unit and the nurse working on the general unit is needed. A research method which goes beyond the scope of this present descriptive study to control extraneous variables and manipulate independent variables is recommended.

A final consideration for future study is concerned with the implications of this study. It is recommended that the influence of assertiveness training suggested under the implications be tested with regards to its influence on the congruence between the concept of self and role. A pretest-posttest static group design might be employed for this study.

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APPENDIX A

Dear

I will be conducting a research study for a thesis as partial fulfillment of the requirements for the degree of Master of Science in Nursing of Loyola University of Chicago. This is a study of nurses who work on critical care and general units. I am requesting the permission of _____ Hospital to allow nurses who work on the Intensive Coronary Care Unit and General Units to participate in the pilot for my study.

The purpose of this study is to answer the following question: Is there a difference in the concept of self in role of nurses working on critical care units as compared to nurses working on general units.

Five nurses who work on the Intensive Coronary Care Unit and five nurses who work on General Units will be chosen for the sample of this pilot study. This will be a nonprobability sample. Nurses from all three shifts will be asked to participate in this study depending on their availability to the researcher on the unit. The subjects will participate during their normally assigned shift at a time convenient for the participants.

The aim and procedures of this study will first be explained to each nurse. Subjects will be given the opportunity to decline from participating. Subjects who agree to participate will then be asked to read the informed consent form. The subject who agrees to participate will then sign the informed consent form and a copy of this consent will be left with each nurse participating in this study. The researcher will be available on the unit to answer any questions the subject may have. It will be emphasized that the subject may withdraw from this study at any time.

Information for this study will be obtained through the use of a two part questionnaire. It is estimated that the questionnaire will take 20-30 minutes to complete. A copy of the questionnaire has been attached to this letter.

Part I of the questionnaire uses the Semantic Differential technique to measure the concepts self and self in the role of nurse. Subjects will be asked to rate the concepts "Myself" and "Myself in the role of nurse" on a total of 24 bipolar adjective pairs, eight for each of the three independent dimensions: evaluative, potency, and activity of the Semantic Differential. These were selected from those bipolar adjective pairs which

have been factor analyzed by Osgood, Suci, and Tennenbaum (1957) and have demonstrated the highest loadings on the evaluative, potency, and activity dimensions of meaning.

Part II consists of a tool designed by the researcher to obtain demographic data. This includes information about educational preparation, age, and work experience.

To guarantee confidentiality, the identity and answers to the questionnaire will remain known only to the researcher. A coding system designed by the researcher will be used. Subjects will complete the questionnaire twice, two weeks apart to establish test-retest reliability of the instrument.

The results of this study have a potential benefit to nursing education, the socialization of nurses into the role of the nurse, and nursing practice. There are no risks to participating in this study.

This study has been approved by the Institutional Review Board for the Protection of Human Subjects at Loyola University of Chicago. It has also been approved by _____ Hospital, where the majority of the data will be collected.

The Director of this thesis has given me permission to present this request to you.

Sincerely,

April 30, 1980

Dear

I will be conducting a research study for a thesis as partial fulfillment of the requirements for the degree of Master of Science in Nursing of Loyola University of Chicago. This is a study of nurses who work on critical care and general units. I am requesting the permission of _____ Hospital to allow nurses who work on these units to participate in my study.

The purpose of this study is to answer the following question: Is there a difference in the concept of self in role of nurses working on critical care units as compared to nurses working on general units.

Thirty nurses who work on critical care units and thirty nurses who work on general units will be chosen for the sample of this study. The nurse on the critical care unit is a registered staff nurse whose usual patient care assignment is on the critical care unit. The critical care unit, for the purposes of this study, has been defined as a separate in-patient area of the hospital designated to provide care for adult patients with primary medical, coronary, and/or surgical problems, and whose condition is critical or has the potential for crisis. The nurse on the general unit is a registered staff nurse whose usual patient care assignment is on the general unit. The general unit, for the purposes of this study, has been defined as an in-patient area of the hospital which provides care for adult patients with primary medical, coronary, and/or surgical problems, and whose condition is regarded as stable or whose prognosis would not be expected to improve on the critical care unit.

This will be a nonprobability sample. Nurses from all three shifts will be asked to participate in this study depending on their availability to the researcher on the unit. The subjects will participate during their normally assigned shift at a time convenient for the participants.

The aim and procedures of this study will first be explained to each nurse. Subjects will be given the opportunity to decline from participating. Subjects who agree to participate will then be asked to read the informed consent form. The subject who agrees to participate will then sign the informed consent form and a copy of this consent will be left with each nurse participating in this study. The researcher will be available on the

unit to answer any questions the subject may have. It will be emphasized that the subject may withdraw from this study at any time.

Information for this study will be obtained through the use of a two part questionnaire. It is estimated that the questionnaire will take 20-30 minutes to complete. A copy of the questionnaire can be found in the Appendix of this research proposal.

Part I of the questionnaire uses the Semantic Differential technique to measure the concepts self and self in role of nurse. Subjects will be asked to rate the concepts "Myself" and "Myself in the role of nurse" on a total of 24 bipolar adjective pairs, eight for each of the three independent dimensions: evaluative, potency, and activity of the Semantic Differential. These were selected from those bipolar adjective pairs which have been factor analyzed by Osgood, Suci, and Tannenbaum (1957) and have demonstrated the highest loadings on the evaluative, potency, and activity dimensions of meaning.

Part II consists of a tool designed by the researcher to obtain demographic data. This will include information about educational preparation, age, and work experience.

To guarantee confidentiality, the identity and answers to the questionnaire will remain known only to the researcher. A coding system designed by the researcher will be used.

The results of this study have a potential benefit to nursing education, the socialization of nurses into the role of the nurse, and nursing practice. There are no risks to participating in this study.

The Director of this thesis has given me permission to present this research proposal to you.

Sincerely,

INFORMED CONCENT

Project Title: The critical care nurse and her concept of self in the role of nurse as compared to the nurse on the general unit.

I, _____ (volunteer), state that I am over 18 years of age and that I wish to participate in a program of research being conducted by Cheryl Goldberg RN.

This is a study of nurses working on critical care and general units. It is concerned with how you define yourself in the role of nurse. To complete this study you you will be asked to fill out a two part questionnaire.

Your identity and answers to the questions will remain known only to the researcher. There are no risks to participating in this study.

The results of this study have a potential benefit to nursing education, the socialization of nurses into the role of the nurse, and nursing practice.

I acknowledge that Cheryl Goldberg RN (Researcher) has fully explained to me that no risk is involved; the need for the research; has informed me that I may withdraw from participation at any time without prejudice; has offered to answer any inquiries which I may make concerning the procedures to be followed; and has informed me that I will be given a copy of this consent form. I free and voluntarily consent to my participation in the research project.

_____
(Signature of Volunteer)

_____
(Signature of Researcher)

_____
(Date)

APPENDIX B

Part I.

The purpose of this study is to determine the meaning of a concept to you. Rate the concept by placing an X in the blank which most accurately describes your feelings about the concept. There are no right or wrong answers.

Example: How would you rate the concept Beauty, given the pair of adjectives important/unimportant? If you feel beauty is very important, place an X at the end of the scale.

important_X_:___:___:___:___:___:___:unimportant

If you feel that beauty is almost entirely unimportant, place an X in the sixth space.

important___:___:___:___:___:_X_:___:unimportant

If you feel that beauty is neither important nor unimportant, or if the adjectives important/unimportant have no meaning for you in relationship to the concept beauty, place an X in the middle space.

important___:___:___:_X_:___:___:___:unimportant

Please place your X in the middle of the space. Do not omit any of the items, even if some of the adjectives seem unrelated to the concept. Place only one X for each pair of adjectives.

Myself

1.	active	___:___:___:___:___:___:___:	passive
2.	low	___:___:___:___:___:___:___:	high
3.	tense	___:___:___:___:___:___:___:	relaxed
4.	strong	___:___:___:___:___:___:___:	weak
5.	deep	___:___:___:___:___:___:___:	shallow
6.	excitable	___:___:___:___:___:___:___:	calm
7.	tenacious	___:___:___:___:___:___:___:	yielding
8.	progressive	___:___:___:___:___:___:___:	regressive
9.	positive	___:___:___:___:___:___:___:	negative
10.	serious	___:___:___:___:___:___:___:	humorous
11.	meaningful	___:___:___:___:___:___:___:	meaningless
12.	clean	___:___:___:___:___:___:___:	dirty
13.	good	___:___:___:___:___:___:___:	bad
14.	optimistic	___:___:___:___:___:___:___:	pessimistic
15.	intentional	___:___:___:___:___:___:___:	unintentional
16.	opaque	___:___:___:___:___:___:___:	transparent
17.	constrained	___:___:___:___:___:___:___:	free
18.	fast	___:___:___:___:___:___:___:	slow
19.	complex	___:___:___:___:___:___:___:	simple
20.	severe	___:___:___:___:___:___:___:	lenient
21.	hot	___:___:___:___:___:___:___:	cold
22.	valuable	___:___:___:___:___:___:___:	worthless
23.	small	___:___:___:___:___:___:___:	large
24.	unimportant	___:___:___:___:___:___:___:	important

Myself in the role of nurse

1.	active	___:___:___:___:___:___:___:	passive
2.	low	___:___:___:___:___:___:___:	high
3.	tense	___:___:___:___:___:___:___:	relaxed
4.	strong	___:___:___:___:___:___:___:	weak
5.	deep	___:___:___:___:___:___:___:	shallow
6.	excitable	___:___:___:___:___:___:___:	calm
7.	tenacious	___:___:___:___:___:___:___:	yielding
8.	progressive	___:___:___:___:___:___:___:	regressive
9.	positive	___:___:___:___:___:___:___:	negative
10.	serious	___:___:___:___:___:___:___:	humorous
11.	meaningful	___:___:___:___:___:___:___:	meaningless
12.	clean	___:___:___:___:___:___:___:	dirty
13.	good	___:___:___:___:___:___:___:	bad
14.	optimistic	___:___:___:___:___:___:___:	pessimistic
15.	intentional	___:___:___:___:___:___:___:	unintentional
16.	opaque	___:___:___:___:___:___:___:	transparent
17.	constrained	___:___:___:___:___:___:___:	free
18.	fast	___:___:___:___:___:___:___:	slow
19.	complex	___:___:___:___:___:___:___:	simple
20.	severe	___:___:___:___:___:___:___:	lenient
21.	hot	___:___:___:___:___:___:___:	cold
22.	valuable	___:___:___:___:___:___:___:	worthless
23.	small	___:___:___:___:___:___:___:	large
24.	unimportant	___:___:___:___:___:___:___:	important

Part II.

Please answer the following questions:

1! Place an X in the space next to the type of patient care unit that you now work on.

___MICU (1)
___ICCU (2)
___SICU (3)
___GENERAL MEDICAL (4)
___GENERAL SURGICAL (5)
___CARDIAC STEP-DOWN (6)

2. Place an X in the space next to your usually assigned work shift.

___7-3 (1)
___3-11 (2)
___11-7 (3)

Please indicate whether you are presently employed full or part-time.

___FULL-TIME (1)
___PART-TIME (2)

4. Indicate your age by placing an X in the appropriate space.

___18-22 (1)
___23-27 (2)
___28-32 (3)
___33-37 (4)
___38-42 (5)
___43-47 (6)
___48-52 (7)
___53-57 (8)
___58-62 (9)

5. Indicate your educational preparation by placing an X in the appropriate space. Mark as many as apply.

___Associate Degree (1)

___Diploma Program (2)

___Baccalaureate in nursing (3)

___Baccalaureate in field other than nursing (4)

___Some college (5)

___Master's degree (6)

6. Indicate the length of time you have spent in your present position.

___less than six months (1)

___six to twelve months (2)

___one to two years (3)

___over two years to five years (4)

___over five years (5)

7. Has this job met your expectations?

___Very much so (1)

___Moderately (2)

___Slightly (3)

___Not at all (4)

8. Are you satisfied in your present position?

___Very much so (1)

___Moderately (2)

___Slightly (3)

___Not at all (4)

9. Have you considered finding a different position?

___Very much so (1)

___Moderately (2)

___Slightly (3) ___Not at all (4)

10. Indicate the length of time you have worked as a Registered Nurse.

___less than six months (1)

___six to twelve months (2)

___one to two years (3)

___over two years to five years (4)

___over five years (5)

11. Please indicate your other work experience as a Registered Nurse. Mark as many spaces as apply.

___MICU (1)

___ICCU (2)

___SICU (3)

___PSYCHIATRIC (4)

___PEDIATRICS (5)

___GENERAL MEDICAL (6)

___GENERAL SURGICAL (7)

___CARDIAC STEP DOWN (8)

___OBSTETRICS AND GYNECOLOGY (9)

___OTHER (10)

___NONE (11)

12. Indicate positions other than staff nurse which you have held.

___Assistant Head Nurse (1)

___Head Nurse (2)

___Supervisor (3)

___Teaching (4)

___OTHER (5)

___NONE (6)

13. If given the choice of <u>always</u> working on a general unit or critical care unit, which would you choose? Place an X in the appropriate space.

___GENERAL UNIT (1) ___CRITICAL CARE UNIT (2)

APPENDIX C

Pilot Mean and Standard Deviation Values for the Concept "myself"

Adjective Pairs	Pilot 1		Pilot 2	
	Mean	Standard Deviation	Mean	Standard Deviation
Active/Passive	5.33	1.00	5.60	1.26
Low/High	4.78	0.83	5.10	0.99
Tense/Relaxed	4.44	1.33	4.70	1.16
Strong/Weak	5.67	1.41	5.30	1.06
Deep/Shallow	5.67	1.12	5.20	1.31
Excitable/Calm	5.33	1.12	5.20	1.23
Tenacious/Yielding	4.22	1.72	4.10	1.29
Progressive/Regressive	5.56	1.24	5.50	1.08
Positive/Negative	5.67	1.12	5.80	1.03
Serious/Humorous	3.78	1.79	4.10	1.85
Meaningful/Meaningless	5.78	1.09	5.80	1.32
Clean/Dirty	6.20	0.42	6.44	1.01
Good/Bad	5.78	0.83	5.90	0.74
Optimistic/Pessimistic	5.67	0.70	5.40	0.75
Intentional/Unintentional	5.78	0.83	5.50	0.71
Opaque/Transparent	5.22	0.97	4.60	0.70
Constrained/Free	4.67	1.58	4.60	0.97
Fast/Slow	5.33	0.87	4.90	0.99
Complex/Simple	5.22	1.09	5.10	1.20
Severe/Lenient	3.67	1.58	3.50	1.27
Hot/Cold	4.78	1.39	4.90	0.88
Valuable/Worthless	6.00	0.71	6.0	0.94
Small/Large	4.33	1.12	4.20	1.69
Unimportant/Important	5.78	1.30	5.90	0.99

Pilot Mean and Standard Deviation Values for the Concept
"Myself in the role of nurse"

Adjective Pairs	Pilot 1		Pilot 2	
	Mean	Standard Deviation	Mean	Standard Deviation
Active/Passive	5.30	1.49	5.40	0.97
Low/High	4.70	1.34	4.50	1.43
Tense/Relaxed	3.60	1.58	3.90	1.20
Strong/Weak	5.20	1.62	5.10	1.10
Deep/Shallow	5.30	1.49	4.90	0.88
Excitable/Calm	5.50	1.08	4.70	1.57
Tenacious/Yielding	4.60	1.58	4.30	1.49
Progressive/Regressive	5.70	1.83	5.70	0.67
Positive/Negative	5.70	1.77	5.20	1.32
Serious/Humorous	5.30	1.77	5.00	1.49
Meaningful/Meaningless	5.90	1.66	5.40	1.17
Clean/Dirty	6.90	0.32	6.40	0.52
Good/Bad	6.30	0.95	6.00	0.82
Optimistic/Pessimistic	5.20	1.81	5.30	1.25
Intentional/Unintentional	6.00	0.94	5.60	0.84
Opaque/Transparent	4.90	0.88	4.80	0.91
Constrained/Free	4.00	1.41	4.00	1.15
Fast/Slow	5.70	0.82	5.50	0.53
Complex/Simple	4.60	0.84	5.20	1.14
Severe/Lenient	3.60	1.07	4.20	1.23
Hot/Cold	4.70	1.42	4.30	0.67
Valuable/Worthless	6.20	0.92	6.20	0.97
Small/Large	4.50	1.50	5.00	1.15
Unimportant/Important	6.10	0.88	6.20	0.79

Pilot Pearson Correlation Coefficient for the Concepts "Myself" and "Myself in the role of nurse"

	"Myself"	"Myself in the role of nurse"
Evaluative	0.80	0.22
Potency score	0.28	0.25
Activity score	0.94	0.87
Total score	0.85	0.44

Pilot Coefficient Alpha for the Concept "Myself"

	Alpha	Standardized Item Alpha
Evaluative Score		
Pilot 1	0.74	0.78
Pilot 2	0.86	0.81
Potency Score		
Pilot 1	0.72	0.77
Pilot 2	0.66	0.67
Activity Score		
Pilot 1	0.76	0.76
Pilot 2	0.67	0.73
Total Score		
Pilot 1	0.87	0.89
Pilot 2	0.85	0.87

Pilot Coefficient Alpha for the Concept "Myself in the role of nurse"

	Alpha	Standardized Item Alpha
Evaluative Score		
Pilot 1	0.79	0.72
Pilot 2	0.82	0.77
Potency Score		
Pilot 1	0.88	0.85
Pilot 2	0.66	0.66
Activity Score		
Pilot 1	0.51	0.53
Pilot 2	0.50	0.62
Total Score		
Pilot 1	0.90	0.87
Pilot 2	0.86	0.86

Sample Mean and Standard Deviation Values for the Concept "Myself"

Adjective Pairs	Critical Care		General Unit	
	Mean	Standard Deviation	Mean	Standard Deviation
Active/Passive	5.74	1.10	5.67	1.40
Low/High	4.44	1.28	5.13	1.12
Tense/Relaxed	4.63	1.64	5.33	1.24
Strong/Weak	5.56	1/88	5.58	1.38
Deep/Shallow	5.52	1.12	4.96	1.27
Excitable/Calm	3.89	1.93	4.71	1.81
Tenacious/Yielding	4.00	1.49	4.46	1.56
Progressive/Regressive	5.78	1.01	5.50	1.42
Positive/Negative	6.15	0.91	6.35	1.11
Serious/Humorous	4.48	1.74	4.29	1.57
Meaningful/Meaningless	6.30	0.95	6.29	0.91
Clean/Dirty	6.63	0.63	6.54	0.93
Good/Bad	6.37	0.79	6.04	1.12
Optimistic/Pessimistic	5.89	1.05	5.88	1.51
Intentional/Unintentional	5.26	1.23	5.67	1.05
Opaque/Transparent	4.44	1.28	4.50	1.22
Constrained/Free	4.60	1.60	4.67	1.81
Fast/Slow	5.74	1.10	5.50	1.18
Complex/Simple	3.96	1.74	4.75	1.73
Severe/Lenient	3.81	1.59	3.75	1.70
Hot/Cold	4.37	1.28	4.58	1.10
Valuable/Worthless	6.26	0.86	6.42	0.88
Small/Large	3.96	1.53	4.83	1.37
Unimportant/Important	6.15	1.10	6.13	1.42

Sample Mean and Standard Deviation Values for the Concept
"Myself in the role of nurse"

Adjective Pairs	Critical Care		General Unit	
	Mean	Standard Deviation	Mean	Standard Deviation
Active/Passive	6.37	1.09	6.00	1.22
Low/High	4.81	1.11	4.92	1.41
Tense/Relaxed	4.74	1.48	4.60	1.50
Strong/Weak	5.63	1.11	5.68	1.44
Deep/Shallow	4.81	1.44	5.12	1.42
Excitable/Calm	4.40	1.67	5.08	1.38
Tenacious/Yielding	4.11	1.63	4.36	1.52
Progressive/Regressive	5.85	1.35	6.04	1.24
Positive/Negative	5.93	1.11	5.88	1.45
Serious/Humorous	4.70	1.81	4.96	1.77
Meaningfull/Meaningless	6.15	1.03	6.40	1.15
Clean/Dirty	6.59	0.75	6.64	0.86
Good/Bad	6.30	0.91	6.40	1.00
Optimistic/Pessimistic	5.74	1.38	5.80	1.44
Intentional/Unintentional	5.44	1.22	5.72	1.43
Opaque/Transparent	4.15	1.10	4.40	1.15
Constrained/Free	4.04	1.43	4.24	1.64
Fast/Slow	5.63	1.11	5.52	1.36
Complex/Simple	4.22	1.63	4.52	1.58
Severe/Lenient	4.52	1,37	4.12	1.64
Hot/Cold	4.30	1.20	4.56	1.00
Valuable/Worthless	6.11	0.97	6.40	0.91
Small/Large	4.15	1.35	4.92	1.04
Unimportant/Important	6.04	1.32	6.32	1.18

Sample Coefficient Alpha for the Concept "Myself"

	Alpha	Standardized Item Alpha
Evaluative Score		
Critical Care	0.60	0.64
General Unit	0.77	0.80
Potency Score		
Critical Care	-0.19	0.01
General Unit	4.22	0.48
Activity Score		
Critical Care	0.53	0.60
General Unit	0.52	0.59
Total Score		
Critical Care	0.62	0.73
General Unit	0.70	0.75

Sample Coefficient Alpha for the Concept "Myself in the role of nurse"

	Alpha	Standardized Item Alpha
Evaluative Score		
Critical Care	0.81	0.83
General Unit	0.88	0.90
Potency Score		
Critical Care	0.43	0.45
General Unit	0.71	0.73
Activity Score		
Critical Care	0.40	0.48
General Unit	0.63	0.64
Total Score		
Critical Care	0.82	0.85
General Unit	0.87	0.88

APPROVAL SHEET

The thesis submitted by Cheryl Mae Goldberg has been read and approved by the following committee:

Dr. Betty Tarsitano, Director
Assistant Professor, Nursing, Loyola

Dr. Marilyn Bunt
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The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee which reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Science in Nursing.

12/8/80
Date

Betty A. Tarsitano
Director's Signature