SELF CONCEPT OF INTENSIVE CARE NURSES AS
COMPARED TO NONINTENSIVE CARE NURSES

by

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A thesis submitted to the faculty of the
University of Utah in partial fulfillment of the requirements
for the degree of

Master of Science

College of Nursing

University of Utah

August 1977
THE UNIVERSITY OF UTAH GRADUATE SCHOOL

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The self concept of intensive care nurses as compared to nonintensive care nurses was the problem explored in this study. It was predicted that the intensive care nurse would have a significantly lower self concept than nonintensive care nurses as measured by The Tennessee Self Concept Scale. This hypothesis was based on the assumption that the particular stressors encountered by the intensive care nurse would have a negative effect on self concept. The specific intensive care stressors may include such variables as the constancy of death and dying, communication breakdowns, extremely heavy and demanding work responsibilities, and lack of rewards from the patient, the family, and co-workers. A total of 77 female nurses, each of whom was employed more than three months at the University of Utah Medical Center Hospital, participated as subjects in this study. Forty of the subjects were intensive care nurses and 37 were employed in nonintensive care positions. To determine the differences between the two groups, one way analyses of variance were computed. There were no significant differences between the two groups on either the Total Positive Score or the subscores as measured by The Tennessee Self Concept Scale. The mean TSCS Score for the two groups combined was slightly higher than the previously established group norms for this scale. It was suggested that factors other than the existence of stress may account for decreased self esteem.
These may be the nurse's personality variables (Type A vs. Type B), internal vs. external locus of control, childhood and adolescent adjustment, and one's usual coping methods. Additional intervening variables affecting the self concept of the nurses in this study may include the sense of accomplishment for excellence in performance during a major power outage in the hospital, the positive effects of the feminist movement, and the low mean age of 28 years. While the original hypotheses in this study were not supported, there was evidence to warrant further investigation into the relationship between stress and self concept in intensive care nurses.
ACKNOWLEDGMENTS

I wish to express my sincere thanks and love to my chairperson, Mandy Manderino, for her constant support, encouragement, and expertise during this study and throughout my graduate education. Appreciation and gratitude are extended to the following people for their contribution to this study:

To Duane Walker for his support, guidance, and administrative knowledge,

To John Seybolt for his expertise and unbiased view of nursing research,

To Carol Kirgis for her encouragement, consultation and teaching in the statistical analysis,

To the nurses at the University of Utah Medical Center Hospital who contributed their time, encouragement, and interest in this study,

To my husband, Bill, for his never failing love, stability, and encouragement. And to our children, Ann, Sue, John, and Sarah, for their belief in my capabilities.
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CHAPTER I

INTRODUCTION

The concept of self is a learned construct. It is the individual's representation of self, the "I" or "me". The individual enhances the self concept by receiving direct external experiences of recognition. A loss of self concept may occur when the person is unable to receive adequate validation of self as a person. Validation may be affected by the outcome of the individual's pursuits of specific goals in interpersonal relationship as well as in role attainment. Each individual has particular roles and relationships which are significant in maintaining a sense of self concept. It is this mental picture of one's self which the person uses as a guideline for future behavior (Shostrom & Brammer, 1952).

A concern reflected in current nursing and medical literature is the effect of stress on the self concept of the intensive care nurse. Lowered self esteem and feelings of personal failure are seen as consequences of the increased stress and conflict. The nurse constantly faces death and dying, has a heavy workload, and receives little rewards from critically ill patients or their families. The intimacy of the unit may increase tension and intra-staff conflict. There is often little opportunity for the nurse to receive recognition from co-workers or to bolster one's own self concept. The literature has described the stressful psychological experience of the
intensive care nurse and has identified specific variables such as: the hectic pace of the intensive care environment, the competition-cooperation dilemma, role conflicts, heavy workload, and communication breakdowns (Bidodeau, 1973; Cassem & Hackett, 1975; Drotar, 1976-77; Gentry, Foster & Froehling, 1972; Hay & Oken, 1972; Kalisch & Kalisch, 1977; Vreeland & Ellis, 1969).

**Statement of the Problem**

The purpose of this study was to explore the differences in self concept between nurses in intensive care units and nurses in nonintensive care units. This is based on the underlying assumption that the continued high stress level of the intensive care unit leads to the nurse’s decreased self esteem and feelings of personal failure. The research problem stated as a question is: Do nurses practicing in intensive care units have lower self concepts than nurses practicing in nonintensive care units?

**Review of Literature**

In view of the stated problem, the review of literature included relevant theoretical and empirical data pertaining to the stress phenomena in intensive care units, self concept, and the relationship of the two variables as studied in intensive care nursing.

**Intensive Care Unit Stress**

Selye (1974), the best known researcher on the body's physiological response to stress, described stress as a nonspecific response of the body to
any demand made upon it. It is a physiological state of energy, more simply stated, "the wear and tear of the body". Stress ranges on an experience continuum of negative or unpleasant to a positive or extremely pleasant experience. Pleasant as well as unpleasant emotional arousal is accompanied by a rise in physiological stress. It is something that can not be avoided.

The body is prepared for physical activity by the stress mechanism in response to stressors. The body's automatic stress response system consists of the primitive brain, the adrenal glands, and the pituitary gland (Selye, 1956). Sources of stressors are: internal body changes, external sensory stimuli, and the cognitive process (Selverston, 1977). Selverston described internal body changes as low blood sugar (from skipping a meal), pain, thirst, bladder tension, and low nicotine levels. The body state will be in disequilibrium and generate adaptive energy or stress. The external sensory stimuli stressors generate stress through the sounds and smells of the patients, the cold, impersonal feel of the equipment, the limited territoriality, and the temperature and the lighting of the unit. The cognitive stressors involve the thought process. This may be a pleasant, positive experience as satisfaction in an accomplishment or it may be a negative, unpleasant experience as in fear, anxiety, or worry. Distress is defined as the recognition of a stressor as an unpleasant, negative experience.

The environment of the intensive care unit itself is stressful. The small size, the sounds of respirators and monitor alarms, the flashing lights, and the presence of endless tubes and bottles are compounded by the moans
of the critically ill patient or by the problems of the newborn with respiratory distress.

A study by Bates (1975) of stress in hospital personnel found that stress scores of interns and nurses with direct patient care responsibilities, on the average, were significantly higher than scores for nurses aides with no direct responsibility. The stress scores for hospital administration and public servants who do not deal directly with patients or clients were also significantly lower. The intensive care nurse must constantly face affect-laden stimuli and the resultant tension and anxiety they create. Stimuli may arouse past unresolved conflicts from literally any psychological development level. The nurse is exposed to multiple threats to stability of body boundaries, to sense of self, and to perception of humanity and reality (Hay & Oken, 1972).

The heavy workload in confined intensive care units, the physical work of turning and lifting comatose patients, and the problem of detailed monitoring and charting all contribute to the nurse's stress. The emergency situation creates added stress as the patient and the family seek reassurance, information, and support from the nurse. Simple procedures may be misconstrued by the anxious family and may place additional burden on the nurse (Cassem & Hackett, 1972; Drotar, 1976-77; Hay & Oken, 1972; Vreeland & Ellis, 1969).

Cassem and Hackett (1972) identified general areas of conflict in a coronary care unit as nursing administration, scheduling, staffing, families, and the weight of responsibility. Nursing administration is seen by coronary care nurses as not appreciating realities of intensive care units, and not
giving sufficient support or supervision (Cassem & Hackett, 1972; Hay & Oken, 1972). The generation gap between the intensive care nurse and nursing administration creates a unique problem (Gardam, 1969). The administrator/ head nurse is caught between supporting the intensive care staff and implementing administrative policies. This can lead to hostility and scapegoating.

Several writers have described staff conflict in the intensive care units. In general, the intensive care nurse is young, aggressive, competent, experienced, and takes pride in work. While some nurses battle authoritarian attitudes, others accept the more traditional nursing role. This can lead to staff conflict with resultant resentment and anger. The group pressures for cooperation in the unit and the fact that there is little time to explore or express anger makes it necessary to either suppress or repress hostilities (Bilodeau, 1973; Drotar, 1976-77; Hay & Oken, 1972; Michaels, 1971; Vreeland & Ellis, 1969).

Drotar (1976-77) states that the intensive care nurse's awareness of the inevitable mistakes, real or exaggerated, and of the dying patient, represent to the nurse a personal failure with resultant decrease in self esteem. There is often staff conflict following a death with nurses questioning the quality of nursing care. A feeling of helplessness may occur in working with the mourning family. The experience of death gives rise to feelings of anger, anxiety, and repetitive object loss. This in turn arouses grief, rage, overcommitment, shame, resentment, and depression. The nurse may feel guilty and question whether (1) a nurse has a right to feel
this way, (2) the feelings are worthy of a nurse, (3) "good" nurses put their own needs after the patient. The result of this stress is seen behaviorally in depersonalization of the patient-nurse relationship, gross denial, high turnover rates, intrastaff conflict and psychosomatic complaints, and decreased self esteem (Cassem & Hackett, 1975; Drotar, 1976-77; Gentry, Foster & Froehling, 1972).

Physician dominance and nurse deference have been predominant role behavior patterns for many years. In medical school, students develop a fear of committing errors which could result in the death of a patient. The intensive care patient may generate feelings of guilt, self-doubt, and frustration in physicians. Physicians may react by becoming demanding and dictatorial to bolster their own self esteem. This not only increases the nurse's frustration but increases the already heavy work load (Hay & Oken, 1972; Kalisch & Kalisch, 1977; Vreeland & Ellis, 1969). Nurses who consider themselves subservient and not as capable alongside physicians cannot participate as colleagues in the work. This is dysfunctional not only for nurses as individuals with low self esteem, but ultimately for the patients who do not receive the quality care to which they are entitled (Fine, 1974; McClosky, 1975; Smoyak, 1974).

The literature suggests that difficult working conditions may have a greater effect on the intensive care personnel than on those in other nursing units. This factor is compounded in the intensive care unit by the other variables of workload, death and dying, role conflicts, and the inability to
relax or to receive personal gratification from patients, family, or nursing staff. The nurse receives little validation of self and is unable to bolster or enhance self concept. Lacking support, the nurse is unable to give full support to others (Bates, 1975; Bilodeau, 1973; Kornfeld, 1969; Vaillant, Sobowale & McArthur, 1972).

**Self Concept**

The individual's self concept has a profound effect on the thinking process, desires, emotions, goals, and values. It is the single most significant key to behavior (Brandon, 1969). The most commonly held definition of the self is, "the individual's dynamic organization of concepts, values, and ideals which determines the ways in which he [she] should behave" (Shostrom & Brammer, 1952, p. 8). It is the psychological entity which a person builds in the process of growing up. An individual is considered "adjusted" when the self concept is consistent with behavior or the experiencing self. This individual revises the self concept so as to keep it in relative harmony with experience. The maladjusted individual is one whose self concept is in dis-harmony with the experiencing self. The individual's ways are inconsistent with the values, goals, and ideals s/he set up. Feelings of anxiety occur with an inconsistent self picture (Shostrom & Brammer, 1952).

Carl Rogers' self theory (1951) is basically phenomenological and is based on the concept of the self as an explanatory construct. Rogers describes the end-point of personality development as a basic congruence between experience and the conceptual picture of the self. The self concept may be
thought of as an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the precepts and concepts of the self in relation to others and to the environment; the value qualities which are seen as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence (Rogers, 1951).

In self theory the self concept is the frame of reference through which the person interacts with the environment. The individual's self concept maintains strong influence on behavior. Knowledge of self concept may serve as a basis for improved understanding and prediction of a person's behavior (Fitts, 1971).

Maslow's (1954) concept of a hierarchy of needs is a practical and useful way of understanding the overall content of behavior. Maslow suggests the concept of five levels of needs ranging from physiological needs to those representing higher development. The first level needs represent the physiological aspects, hunger and thirst. The second consists of the needs for safety. The individual tries to avoid external dangers that may bring harm to the self. The third level is the belongingness and love need. This is the need to give and to receive affection, love, and warmth from other persons. The need for esteem is the fourth level. Maslow describes this as a need or desire for self-respect or self esteem and for the esteem of others. Satisfaction of the self esteem need leads to feelings of self confidence, worth, capability, and adequacy. Thwarting of these needs produces feelings of weakness, inferiority,
and helplessness. The fifth level, the need for self-actualization, refers to the desire for self-fulfillment. This is the desire to become more and more what one is, to become everything that one is capable of becoming. Maslow proposes that this need is a basic force that influences and motivates much of human behavior. Self-actualization stresses maximum development of human potential.

Rogers (1951) stated that the fully functioning person is in a state of congruence of self with experience. This is when self experiences are symbolized, perceived, and organized into a consistent relationship with the concept of self. The fully functioning person has characteristics of self-regulation and self-direction which direct the person toward satisfaction of basic needs, self actualization, and adequate behavior (Rogers, 1961).

Combs and Syngg (1959) suggest that each person has a need to maintain and enhance the phenomenal self. Self enhancement increases the individual's self esteem which is related to maintenance of self concept. A risk of decreased self esteem involves a change in self concept and is therefore seen as a threat and is resisted. A positive self esteem is necessary before the individual is able to become self actualized (Combs & Syngg, 1959; Maslow, 1954; Rogers, 1951).

Self concept is largely a product of acculturation. It is developed from communicated values from others' behavior toward the individual. It is a lifelong process of interpersonal relationships beginning with the infant's family, extending to school, social interactions, and to the work situation (Combs &
Syngg, 1959; Rogers, 1961; Sullivan, 1940, 1956).

Fitts (1971) proposed that the self concept is strongly affected by three main factors:

1. **Experiences**, especially interpersonal experiences, which generate positive feelings and a sense of value and worth.

2. **Competence** in areas that are valued by the individual and others.

3. **Self-actualization**, or the "implementation and realization of one's true personal potentialities--whatever they may be" (p. 38).

**Organizational Stress**

The average worker spends approximately 35 per cent of the waking hours in a work situation. If the work experience is introduced into the self there may be a close relationship between self-esteem and work. "Especially healthy and stable self-esteem (the feeling of worth, pride, influence, importance, etc.) rests on good, worthy work to be introjected, thereby becoming part of self" (Maslow, 1965, pp. 12-13).

Cooper and Marshall (1976) identified two main characteristics of stress in work situations: (1) the traits of the person, and (2) the work environmental source of stress, or Person-Environment Fit. The interaction of the two characteristics determines stress-related disease and coping or maladaptive behavior. The individual's outside relationship and activities can also be a source of stress.
Selye (1974) stated that work is basic to people. While stress is associated with every kind of work, distress is not. Distress is defined as the recognition of a stressor as an unpleasant, negative experience. Organizational stress is defined as the negative environmental stressors, such as role overload and underload, role conflict/ambiguity, poor working conditions, working relationships, and organizational structure and climate (Cooper & Marshall, 1976; Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964; Sales, 1970; Warr & Wall, 1975).

Role overload is having more to do than the individual is able to do in the time available. Role underload is being required to do considerably less than the individual is able to do in the time available (Sales, 1970). Individuals subjected to role overload report tension, poor interpersonal relations, low job satisfaction, and low self-esteem (Kahn et al., 1964; Sales, 1970). In a study by Sales (1970) the data implied that "increased work loads may improve system performance on some levels--such as productivity--but that these same increased work loads may also exert deleterious influences both upon system performance (e.g., with respect to errors) and upon individuals involved (e.g., with respect to their self-esteem and their experienced tension and anger)" (p. 606).

French, Tupper, and Mueller (cited in Cooper & Marshall, 1976) studied qualitative and quantitative work overload and found that one symptom of stress, low self-esteem, was related to qualitative work overload. The demanding work load of the intensive care nurse (e.g., responsibility for
lives of patients, and making decisions in crisis situations), may affect
the nurse's self esteem (Cassen & Hackett, 1972; Hay & Oken, 1972).

Role conflict occurs when an individual in a specific work role re­ceives conflicting job demands or demands for doing things s/he really does
not want to do or does not think are part of the job specification. Role ambi­
guity exists when the individual has lack of clarity about work expectations
associated with a specific role (Kahn et al., 1964). Individuals experiencing
role conflict reported lower job satisfaction and job-related tension while
those experiencing role ambiguity reported lower job satisfaction, greater
futility, and lower self confidence (Kahn et al., 1964).

The role ambiguity was studied by Lyons (1971). It was found that
nurses with reported role ambiguity experienced higher job-related tension
and were less satisfied. Nurses with greater role ambiguity showed stronger
tendency to voluntarily leave their jobs.

In a study using The Tennessee Self Concept Scale, Schalon (1967)
concluded that persons with low self esteem are more adversely affected by
stress than persons with high self esteem. The low self esteem subjects'
improvement in performance was significantly impaired by stress while the
improvement of those with high self esteem was not. Gividen (cited in Fitts,
1965) evaluated the effects of stress and failure on the self concepts of Army
paratroop trainees. Gividen administered the TSCS before and after the
physical and attitude training in which failure was considered a disgrace.
Both the Pass group and the Fail group showed significantly greater decrease
The literature describing stress on the intensive care nurse identified the bombardment of sensory stimulation, the critically ill, the comatose or dying patient, the impossible workload, communication breakdown, role conflicts, and great personal responsibility. The effects of the high level of stress are object loss, depersonalization and depression, and anger and guilt over inability to restore patients to health. These feelings may well lead to feelings of personal failure, lack of self gratification, and a resultant lowering of self concept.

The individual acting inconsistently with his/her self structure may have a loss in self esteem, loss of identity, insecurity, and anxiety about one's acceptability to others (Jourard, 1958). Jourard (1964) described the nurse who is able to give personalized care. "A person who cares about herself [himself] has been cared for in the past and is being cared about in the present by others. This person is free then to care about others" (p. 204).

Nurses, like others, often choose a career to match their personality characteristics (Watson, 1977). Watson further suggested that the intensive care nurse's ability to provide quality care to the patient is due to true selflessness—willingness to put one's own needs and wishes after those of others. This can be a source of energy to give the patient care but can also lead to frustration, personal dissatisfaction, and depression of masochistic proportions in extreme cases. If the needs of the nurse are not satisfactorily met, it is unlikely s/he will be able to meld the humanistic and technical
qualities to provide excellent patient care.

Muhlenkamp and Parsons' (1972) overview of research on nurses suggested that nurses as a group share common characteristics generally consistent with the female stereotype: high social service interest, choice of a helping role, submissiveness and dependency, and low economic values. The authors predicted these characteristics would change as individuals rejected the traditional feminine role and examined other career roles.

The significance of this study is related to individual nurses, to nursing education, nursing administration, personnel placement, and inservice education. A significant correlation between a low self concept and the intensive care nurse may be useful in formation in the development of undergraduate nursing curriculum and for counseling of applicants for intensive care unit employment. The results of this study apply to the specific sample tested at the time. The results would also be useful for inservice education for intensive care personnel to increase awareness of stressors and the effects of stress. The study may suggest approaches to absenteeism, high turnover rate, and job satisfaction of intensive care nurses. In addition, results may suggest further research in the area of stress and self concept and their interrelationships.

The literature gives support to the implicit assumption that the stress of the intensive care environment, the critically ill patient, the constancy of death and dying, and the lack of personal gratification might well be related to a decreased self concept of the intensive care nurse.
Hypotheses

Based on the review of literature and the stated problem, the following null hypotheses were proposed:

1. There are no significant differences in Total Positive Score on The Tennessee Self Concept Scale between intensive care nurses and non-intensive care nurses.

2. There are no significant differences between intensive care and non-intensive care nurses on each of the following Tennessee Self Concept Scale subscores:
   a. Self criticism
   b. Basic identity (What one is)
   c. Self satisfaction (How one feels about self)
   d. Behavior (What one does)
   e. Physical self
   f. Moral-ethical self
   g. Personal self
   h. Family self
   i. Social self
CHAPTER II

METHODOLOGY

Description of Sample

A total of 77 registered nurses working in four intensive care units and four nonintensive care units at the University of Utah Medical Center Hospital were used in the study. The facility is a major teaching and research hospital in Salt Lake City. The sample was limited to female registered nurses employed on the specific unit at least three months and designated in a staff nurse position. The nursing units were matched by utilizing the intensive care and nonintensive care units to which the patients were directly transferred, e.g., surgical intensive care unit and post-surgical unit.

The term registered nurse included those educated at the two year associate degree level, three year diploma level, and four year degree level. These nurses had similar job descriptions and responsibilities in the intensive care and in the nonintensive care units at the University of Utah Medical Center Hospital.

Forty nurses of the total sample were from four intensive care units: newborn intensive care, surgical intensive care, coronary care, and a cerebro-vascular unit. Thirty-seven nurses were distributed among four
nonintensive care units: newborn nursery, post surgical unit, a primary care unit, and a gynecology/neurology unit.

The mean age of the total sample of 77 nurses was 28 years. Thirty-four were single, five divorced, 37 married, and one widowed. Forty were four year degree nurses, 24 three year diploma nurses, and 12 were two year associate degree nurses. The mean length of employment was 23 months. Forty-eight nurses were the primary wage earner, 27 were not the primary wage earner, and 2 failed to answer. The mean hours worked per week were 38 hours. The religious preferences of the total sample were: Catholic 10; "other" 19; Protestant 18; Church of Jesus Christ of Latter-day Saints (Mormon) 14; Jewish 1; and 5 indicated no religious preference.

Instrument

The Tennessee Self Concept Scale was used in this study to measure differences in self concept of nurses working in intensive care units as compared to those in nonintensive care units.

The TSCS was developed by William Fitts in 1955 for use in mental health research. The Scale has been used successfully in testing nonpatient-subjects for use in counseling and in personnel selection in addition to use with assessment and diagnosis. The author, Fitts, compiled a large pool of self descriptive items from other self concept measures and from written self descriptions of patients and nonpatients. Following considerable study, the items were classified on the basis of what the subjects themselves were
saying. Each item of the resultant two-dimensional, 3 x 5 scheme was 
judged by seven clinical psychologists according to category and negative 
content. The final 90 items received perfect agreement by seven clinical 
psychologists. The Scale contains 90 items, equally divided as to positive 
and negative and 10 self criticism items.

The Tennessee Self Concept Scale was standardized from a normative 
sample of 626 people. The sample included people from various parts of the 
country, ranging in age from 12-68 years. There were approximately equal 
numbers of males and females, and of blacks and whites, representing all 
socioeconomic, intellectual, and educational levels from 6th grade through 
Ph.D.

Reliability has been established from .60 to .90 with test-retest 
with two week time lapse on a sample of 60 college students. A reliability 
coefficient of .88 for total Positive Score was obtained on a shortened 
version with a sample of psychiatric patients. Fitts (1965) has demon-
strated that distinctive features of individual profiles are present a year 
later.

Validation of group discrimination of the TSCS was demonstrated 
between psychiatric patients and nonpatients, between delinquents and non-
delinquents, and between the average individual and the psychologically 
integrated individual.

Content validity was established to insure the dependability of the 
Column Scores and the Row Scores. An item was retained in the Scale only
if it received unanimous agreement by the seven clinical psychologists.

This Scale is available in two forms, the Counseling Form and the Clinical and Research Form. Each form uses the same test items and test booklet with different scoring and profiling systems. The Clinical Research Form is more complex in scoring and analysis. The Counseling Form is appropriate for self interpretation and feedback to counselees and requires less sophistication in psychometrics and psychopathology. The whole conceptual scheme of the Counseling Form is designed to make a relevant profile and on this basis was chosen for this study.

Each subject received an answer sheet and test booklet and was asked to answer the statements as if she were describing "yourself to yourself." The Likert-type responses ranged from completely false, partly false/partly true, to mostly true and completely true. The answer sheet carbon-marked the scoring sheet below. Scores were hand tabulated on the attached Score sheet.

The Total Positive Score (Total P) is the single most important score on the Counseling Form. It reflects the overall level of self esteem. This score is the total sum of positive responses.

The subscores on the Counseling Form are:

1. Self criticism score
2. Basic identity (What the individual is, "what I am")
3. Self satisfaction (How the individual feels about self, self acceptance)
4. Behavior (What the individual does, "this is how I act")

5. Physical self (The individual's view of his/her body, state of health, physical appearance, skills and sexuality)

6. Moral-ethical self (Description of moral worth, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it)

7. Personal self (An evaluation of one's personality apart from body or relationship to others, one's personal worth and feelings of adequacy)

8. Family self (One's feelings of value, worth, and adequacy in reference to the closest and most intimate associations)

9. Social self (The score reflects a sense of adequacy and worth in social interaction with "others" in a general way)

Demographic information was collected along with The Tennessee Self Concept Scale. This included age, marital status, nursing educational level, unit in which employed, and length of employment in the unit. These were used to describe the sample.

**Method of Data Collection**

The investigator obtained written consent of each volunteer subject prior to inclusion in the study (Appendix A). Each subject completed The Tennessee Self Concept Scale and a demographic information form. The TSCS is a self administered tool.
The investigator met with each head nurse to explain the study, to answer questions, and to encourage her support of the study (Appendix C). The Scale was taken in groups or individually at the convenience of participants. Confidentiality was maintained by use of identification number and name of unit. No names were used with the exception of the signed consent form. The data was collected over a six day period.

Statistical Analysis

The aim of this study was to compare self concept scores between two groups of nurses. One group consisted of nurses employed in intensive care settings and the other group consisted of nurses employed in nonintensive care settings. One way analyses of variance were computed to determine the differences between the means of the groups. The one way analyses of variance for the two groups are mathematically equivalent to a t-test for independent means (Ferguson, 1976).
CHAPTER III

RESULTS AND DISCUSSION

The purpose of this study was to determine self concept of intensive care nurses as compared to nonintensive care nurses as measured by The Tennessee Self Concept Scale. To determine differences between the scores of intensive care nurses and the nonintensive care nurses, one way analysis of variance was computed (Guilford, 1973).

Table 1 reports the results of the one way analysis of variance on a Total Positive Score between intensive care nurses and nonintensive care nurses as measured by The Tennessee Self Concept Scale. The .05 level of significance was established. There were no statistically significant differences between the two groups; therefore, the null hypothesis was accepted.

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean Squares</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Group</td>
<td>339.25</td>
<td>1</td>
<td>.336</td>
<td>.556</td>
</tr>
<tr>
<td>Within Groups</td>
<td>935.70</td>
<td>75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A decreased self concept does not seem to be a consequence of increased stress on the intensive care nurses in this particular population. The stressors may be higher in the intensive care units but this variable does not seem to affect the Total Positive Score of this population. The results are consistent with those found in a similar study (Gentry, Foster & Froehling, 1972). The Gentry et al. study reported no statistical differences between intensive care nurses in terms of either Total Positive Score or the subscores on The Tennessee Self Concept Scale. Their results indicated that, in general, intensive care nurses appeared to report more hostility, depression, and anxiety than the nonintensive care nurses. The Medical Center coronary care nurses reported more negative effects from and dislikes about their work than nurses working in the Veteran's Hospital coronary care unit. "The psychologic response evidenced on the various tests appeared to be associated with situational stress including an overwhelming workload, too much responsibility, poor communication between nurses and physicians, limited work space, and too little continuing education" (p. 796).

One interesting finding was that the combined mean score on the Total Positive Score was higher than the norms for The Tennessee Self Concept Scale. The mean age of the population of this study was 28.4, forty of the nurses had four year degrees, 48 were the primary wage earners, and 34 were single. One may speculate as to the positive effects of the feminist movement, of assertiveness training in the undergraduate nursing curriculum,
and of continuing education on the individual nurse. An event that may have
affected self concept levels was a major power outage in the hospital one
week prior to the collection of data. The nurses in the population reported
a sense of achievement and accomplishment for excellence in performance
during the emergency. An assumption could be made as to the positive effect
of this emergency upon both the nonintensive care and intensive care nurses.

Sources of pressure at work elicit different responses from different
people. Some cope with stressors better than others and are better able to
adjust their behavior to meet the situations. The term "coping" implies the
attempt to solve a problem or at least to deal with it. The intensive care
nurses in this study may be coping effectively with the increased stress, and
may not be experiencing a decrease in self esteem.

The literature has described the intensive care nurse as aggressive,
competent, and willing to assume responsibility and to work under crisis
situations. This description is somewhat similar to the behavior pattern of
Type A personality associated with stress related disease. Type A is
categorized by extremes of competitiveness, striving for achievement,
aggressiveness, haste, feelings of being under pressure of time and under
the challenge of responsibility (Jenkins, 1971). Jenkins further suggested
that these people were often so deeply involved and committed to their work
that other aspects of their lives were somewhat neglected. The relationship
between the intensive care nurse and Type A personality would be an inter­
esting study in the Person-Environment Fit.
In general, intensive care nurses are a self selected group and have greater responsibility than nurses in nonintensive care units. These nurses make critical decisions in emergency situations involving direct patient care. In this study, the increased responsibility may have had an inverse effect and thereby may have increased the self esteem of the intensive care nurses in this population.

Table 2 summarizes the mean scores of The Tennessee Self Concept Scale Total Positive Score by unit. There appeared to be a trend between a surgical intensive care unit (Unit A) and a nonintensive care unit (Unit C1). A t-test was computed to determine the differences (Guilford, 1973).

Table 2
Summary Table of Mean Scores of The Tennessee Self Concept Scale Total Positive Score by Unit

<table>
<thead>
<tr>
<th>Intensive Care Unit</th>
<th>Number Subjects</th>
<th>Mean</th>
<th>Nonintensive Care Unit</th>
<th>Number Subjects</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit A</td>
<td>7</td>
<td>329.42</td>
<td>Unit A1</td>
<td>13</td>
<td>354.15</td>
</tr>
<tr>
<td>Unit B</td>
<td>19</td>
<td>357.78</td>
<td>Unit B1</td>
<td>7</td>
<td>361.14</td>
</tr>
<tr>
<td>Unit C</td>
<td>9</td>
<td>360.00</td>
<td>Unit C1</td>
<td>8</td>
<td>368.87</td>
</tr>
<tr>
<td>Unit D</td>
<td>5</td>
<td>375.00</td>
<td>Unit D1</td>
<td>9</td>
<td>358.33</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>355.47</td>
<td></td>
<td>37</td>
<td>359.67</td>
</tr>
</tbody>
</table>

Combined Total Positive Mean Score: 357.49
The results of the t-test are shown in Table 3. They indicate the existence of the differences between Unit A and Unit C1 on the Total Positive Score, Self Satisfaction Score, Behavior Score, and Personal Self Score. Unit A, a surgical intensive care unit, may be similar to the stressful units described in the literature. This unit receives the most critically ill surgical patients. A self report by nurses employed on the unit indicated an understaffing problem, communication difficulty, long work hours, limited work space, and little time for personal rewards. They report a constancy of obtunded patients, death, and dying. It may be that certain kinds of intensive care units (e.g., surgical units) are more stressful than others, thereby leading to decreased self esteem among its nurses.

Table 3
Summary Table of t-Test Values Between Unit A and Unit C1

<table>
<thead>
<tr>
<th>Scores</th>
<th>t-values</th>
<th>2-tail problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Positive</td>
<td>2.33</td>
<td>.03*</td>
</tr>
<tr>
<td>Self Criticism</td>
<td>.04</td>
<td>.96</td>
</tr>
<tr>
<td>Basic Identity</td>
<td>1.92</td>
<td>.07</td>
</tr>
<tr>
<td>Self Satisfaction</td>
<td>2.21</td>
<td>.04*</td>
</tr>
<tr>
<td>Behavior</td>
<td>2.34</td>
<td>.04*</td>
</tr>
<tr>
<td>Physical Self</td>
<td>1.28</td>
<td>.22</td>
</tr>
<tr>
<td>Moral-Ethical Self</td>
<td>1.18</td>
<td>.25</td>
</tr>
<tr>
<td>Personal Self</td>
<td>2.87</td>
<td>.01*</td>
</tr>
<tr>
<td>Family Self</td>
<td>1.82</td>
<td>.09</td>
</tr>
<tr>
<td>Social Self</td>
<td>2.03</td>
<td>.06</td>
</tr>
</tbody>
</table>

*Statistically significant
Table 4 summarizes the results of the one-way analysis of variance of the subscores of The Tennessee Self Concept Scale between intensive care nurses and nonintensive care nurses. There were no statistically significant differences between the two groups. The null hypothesis was accepted.

There are many possible variables to be considered when examining the relationship between stress and self concept. Potential intervening variables may include: personality variables (e.g., Type A vs. Type B, internal vs. external locus of control), childhood and adolescent adjustment, and the one's usual coping methods. The nurse's motivational factors, job expectations and satisfaction, and leadership styles of the administration and head nurse would be relevant variables in future studies of self esteem.

The relationship between self esteem and career aspirations was studied by Burgess (1976). It was found that registered nurses in the study reported high self esteem and relatively high levels of career aspirations. Those nurses scoring lower on self esteem also scored lower on career aspiration. The study indicated that high career goals were associated with high self esteem and lower self esteem with lower career goals. It may be inferred that the nurses with lower self esteem had adjusted their aspirations downward while those with higher career goals adjusted theirs higher. Consistent with the Burgess study (1976), continuing career goals may have increased self esteem in this study. Many nurses in the present study indicated a desire to continue with educational opportunities and indeed were part time students.
Table 4

Summary Table for the Analysis of Variance Between the Two Groups on the Subscores

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean Squares</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Criticism</td>
<td>3.65</td>
<td>1</td>
<td>.12</td>
<td>.725</td>
</tr>
<tr>
<td></td>
<td>29.69</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Identity</td>
<td>.31</td>
<td>1</td>
<td>.003</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>95.81</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Satisfaction</td>
<td>80.71</td>
<td>1</td>
<td>.43</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td>184.66</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>60.60</td>
<td>1</td>
<td>.51</td>
<td>.48</td>
</tr>
<tr>
<td></td>
<td>118.28</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Self</td>
<td>28.49</td>
<td>1</td>
<td>.41</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>68.32</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral-Ethical Self</td>
<td>10.46</td>
<td>1</td>
<td>.186</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>56.27</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Self</td>
<td>25.87</td>
<td>1</td>
<td>.47</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>54.97</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Self</td>
<td>7.37</td>
<td>1</td>
<td>.17</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td>43.22</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Self</td>
<td>62.59</td>
<td>1</td>
<td>1.05</td>
<td>.31</td>
</tr>
<tr>
<td></td>
<td>59.62</td>
<td>75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Limitations of this study include: use of one hospital and a small sample within the hospital, exclusion of the nurses in the operating room, emergency room, burn unit, and several other medical units. Census of the hospital or of the units was not considered. A closer match of nursing units may provide a better comparison between self concept and stress. The population was limited to staff nurses and excluded both head nurses and practical nurses. Therefore, results are not generalized to populations outside the present institution or to positions other than staff.

The review of literature described the effects of stress on the self concept of the intensive care nurse. Lowered self esteem and feelings of personal failure were seen as consequences of increased stress. This assumption was not substantiated in this study.

There were no significant differences in self concept between intensive care nurses and nonintensive care nurses. It was found, however, that nurses in this present study showed higher than norm scores. This suggests that the presence of stress alone does not account for decreased self esteem. Other intervening variables that may be considered include: age of nurses, effects of the feminist movement, and situational variables, such as the power outage in the hospital.

**Recommendations**

This study was conducted at one hospital. Enlarging the number of participating hospitals would be helpful in a comparison study to isolate
differences between hospitals in relationship to stressor variables. A study including both male and female nurses would be useful to determine similarities and differences with respect to the relationship of the sex of the subject on self concept. Future studies may consider the effect of tenure on self concept and the relationship of personality variables (Type A vs. Type B personality) on the intensive care nurse.
APPENDIX A

Informed Consent

I ___________________________ voluntarily agree to participate in a study which involves the measurement and comparison of several aspects of personality. I understand that I will be asked to complete a brief personal questionnaire as well as a self concept test which will take approximately 15 minutes. My participation in the study has been explained and I understand what is involved. Any questions concerning the procedures will be answered to my satisfaction. I understand that anonymity will be maintained and the personal information will be handled in a confidential manner. I also understand that I am free to withdraw from the study at any time for any reason. The results of the study will be shared with me if I so request.

_____________________________  ___________________________
Date                                 Signature
APPENDIX B

Personal Data Sheet

1. Subject identification number ______________________

2. Unit in which employed ________________________________

3. Marital status:  
   a. Divorced _______________________
   b. Married _______________________
   c. Separated _______________________
   d. Single _________________________
   e. Widowed _______________________

4. Age in years __________________________

5. Employment status:
   a. 2 year associate degree _______________
   b. 3 year diploma _______________________
   c. 4 year degree _______________________

6. Length of employment in months in present unit _____________

7. Primary wage earner? This includes single persons providing for themselves or others.
   a. Yes ______
   b. No ______

8. Religious preference:
   a. Catholic _______________
b. Jewish

c. LDS

d. Protestant

e. Other

9. Hours worked per week
APPENDIX C

Communication to Head Nurses

May 4, 1977

TO: Head Nurses  
CVU  
5 West Unit 
3 West Unit 
NB ICU

CCU  
4 West Unit 
3 East ICU 
NB Nursery

FROM: Donna Vogel, graduate student, Psychosocial Nursing

SUBJECT: Collection of data for Master's thesis on self concept of nurses

Approval has been given by the Human Subjects Committee and the Nursing Administration of the University of Utah Medical Center Hospital to collect data on self concept of nurses. I request your approval and support for the study.

I will meet with each head nurse to explain the study, to answer questions and to select convenient times for administration of the questionnaire. An effort will be made to use a room close to your unit. Confidentiality will be maintained throughout the study. The forms take about 15 minutes to complete.

The results of the thesis will be shared with the Nursing Administration, clinical specialists, and interested head nurses and individual nurses.
Nurses Eligible for the Study

Female Registered Nurses
2 year Associate Degree Nurses
3 year Diploma Nurse
4 year Degree Nurse
Nurses working on the specific unit at least three months
Nurses working in a staff position.

THANK YOU FOR YOUR COOPERATION
REFERENCES


Burgess, G. Self-esteem and career aspiration among nurse participants of continuing education. The Journal of Continuing Education in Nursing, 1976, 7 (2), 7-12.


Watson, D. Psychiatric liaison services to the critical care nursing staff. Critical Care Update, March 1977, pp. 5-11.
VITA

Name
Birthdate
Birthplace
School of Nursing
1950-1953
University
1954-1955
1959
1973-1975
Degree
1975
Professional License
Professional Organizations
Professional Positions

Donna Rockswold Vogel
January 21, 1932
Litchville, North Dakota
Bismarck Hospital School of Nursing
Bismarck, North Dakota
Northwestern University
Evanston, Illinois
University of Michigan
Ann Arbor, Michigan
University of Utah
Salt Lake City, Utah
Bachelor of Science
University of Utah
Salt Lake City, Utah
Registered Nurse, Utah License
Registered Nurse, North Dakota License
American Nurses' Association
Utah Nurses' Association
Staff Nurse (1960, 1953)
Bismarck Hospital
Bismarck, North Dakota
Staff Nurse (1958-1960)
Veteran's Administration Hospital
Ann Arbor, Michigan
Staff Nurse (1956-1957)
Newport Hospital
Newport, Rhode Island
Staff Nurse (1955)
St. Mary's Hospital
Athens, Georgia

Staff Nurse (1953-1955)
Evanston Hospital
Evanston, Illinois