



1984

An Observational Study of the Self-Perceptions of Clinical Competency in New and Experienced Pediatric Staff Nurses

Roseann M. Zahara-Such
Loyola University Chicago

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AN OBSERVATIONAL STUDY OF THE SELF-PERCEPTIONS OF
CLINICAL COMPETENCY IN NEW AND
EXPERIENCED PEDIATRIC
STAFF NURSES

by

Roseann M. Zahara-Such

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fullfillment
of the Requirements for the Degree of
Master of Science in Nursing

April

1984

ACKNOWLEDGMENTS

I am deeply grateful to Dr. Elizabeth B. Brophy, my director, who has given her support and guidance endlessly throughout the entire course of this research study. I also wish to acknowledge the assistance given to me by Dr. Dona J. Snyder and Beverly Kopala as members of my committee. In addition, I appreciate the cooperation of all of those involved in this study from Children's Memorial Hospital where the research was conducted. I am particularly thankful to the participants, the Staff Nurse Specialists, and the members of the Nursing Staff Development Department.

I am especially debted to my family whose perseverance and unending support and interest in my thesis and graduate education has contributed to my success. This special thanks is to my mother, Angeline Zahara, my husband, Charles Such, and to my daughter, Brielle Rose Zahara-Such.

VITA

The author, Roseann Mary Zahara-Such, is the daughter of the late Walter J. Zahara and Angeline (Benigno) Zahara. She was born June 1, 1952, in Chicago, Illinois.

Her elementary education was obtained in the parochial schools of Chicago, Illinois, and secondary education at St. Stanislaus Kostka High School, Chicago, where she graduated with honors in May, 1970.

In September, 1970, she entered Loyola University, Chicago, where she graduated in May, 1975 and received the degree of Bachelor of Science in Nursing.

She worked as a professional nurse between 1975 and 1984 at Children's Memorial Hospital. Her area of specialty was Pediatric Nursing, and her major area of interest was teaching. She has been a Clinical Educator in the Nursing Staff Development Department since 1982.

In September, 1979, she entered the Master of Science in Nursing program at Loyola University of Chicago. In May, 1984, she was awarded the degree of Master of Science in Nursing.

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CHAPTER I

INTRODUCTION

In the profession of nursing, much emphasis is placed upon clinical competency. Some professionals define clinical competency solely in terms of technical skills. In this study, clinical competency was broadly defined in terms of three factors, i.e., (1) intellectual competency (knowledge), (2) physical-manual competency (skill), and (3) interpersonal competency.

One of the reasons why the concept of clinical competency is difficult to define and evaluate is the existence of multiple areas of specialization in nursing, such as Obstetrical, Public Health, Psychiatric and Pediatric Nursing and, consequently, multiple modes of nursing intervention. Also, because so much basic information must be included in the undergraduate nursing curriculum, limited practical experience is provided for nursing students in each of the clinical areas of specialization. Therefore, it generally takes a new graduate a reasonable period of time in clinical practice to attain expertise in any specialty area of nursing. An early personal goal for the new graduate is the development of that degree of competency which enables her to function in the clinical (specialty) area with a realistic measure of independence.

The concern for the length of time needed to attain an identifiable level of competency is further complicated by the recognized difficulty in the assessment of clinical competency in any area of

specialization. Individual practitioners, supervisors and other personnel in nursing struggle with the complex task of defining and evaluating clinical competency as well as an identified lack of appropriate instrumentation. This study focuses on the problem of defining and evaluating clinical competency in the specialty of Pediatric Nursing.

In order to function independently in the specialty area of Pediatric Nursing, the individual practitioner must not only possess specific knowledge and skill in the care of children, but must also have a sense or an awareness of the degree to which she possesses this knowledge and skill. Consequently, several research questions were posed in this thesis. What are pediatric staff nurses' self-perceptions of clinical competency? What is the feasibility of using the Benner Proficiency Scale (BPS) in the pediatric setting? Do differences exist between the new graduate's self-perceptions of clinical competency in Pediatric Nursing and the experienced nurse's self-perceptions of clinical competency in Pediatric Nursing as revealed in the subject's responses to the BPS?

Admittedly, the art of defining and evaluating clinical competency of pediatric staff nurses is in its initial stages of development. The present project then, represents an exploratory study which hopefully will serve as a basis for future research.

This researcher recognizes the fact that the profession of nursing is represented by members of each gender. For the sake of clarity and ease of presentation the pronouns "her" or "she" was used throughout the thesis.

Definition of Terms

For the purpose of this study, the following definitions were used:

Clinical Competency: performance in the provision of nursing care including (a) intellectual competency, (b) physical-manual competency and (c) interpersonal competency. Operationally, a measure of clinical competency was obtained using the Benner Proficiency Scale (BPS) (see Appendix A).

Self-Perceptions: the nurse's assessment of her ability to provide direct care for the pediatric patient and his family.

Pediatric Nursing: nursing care of any neonate, infant or child who has been hospitalized for medical and nursing care.

Pediatric Staff Nurse: a baccalaureate prepared nurse who is actively involved in the nursing care of neonates, infants, children and in the promotion of family health within the hospital setting. In the present study she was described as either a new graduate or as an experienced nurse.

New Graduate: nurses who have graduated within one year with one year or less of staff nursing experience in a pediatric hospital.

Experienced Nurse: nurses who have three or more years of clinical experience in a pediatric hospital.

Assumptions

The following assumptions were made:

- I. New graduate and experienced pediatric staff nurses' responses to the BPS gave an indication of their self-perceptions of

clinical competency in pediatric nursing.

- II. New graduate and experienced pediatric staff nurses' responses of self-perceptions of clinical competency gave some indication of their actual clinical performance of pediatric nursing skills.

Research Questions

In this project the following questions were explored:

- I. What are pediatric staff nurses' self-perceptions of clinical competency?
- II. What is the feasibility of using the BPS in the pediatric setting?
- III. Do differences exist between the new graduate's self-perceptions of clinical competency in Pediatric Nursing and the experienced nurse's self-perceptions of clinical competency in Pediatric Nursing as revealed in the subject's responses to the BPS?

CHAPTER II

REVIEW OF THE LITERATURE

In order to explore the questions proposed in this study, the investigator reviewed the literature in (a) Pediatric Nursing and (b) Clinical Competency.

Pediatric Nursing

The work of nursing ill children, according to Nightingale, needed a special temperament and talent (Atkinson, 1981). Her philosophy about pediatric nursing readily becomes apparent in the following quotation:

It is not enough to be merely conscientious and patient, there must be genuine vocation and love for the work. A feeling as if your own happiness were bound up in each particular child's recovery. Nothing else will carry you through the perpetual wear and tear of the spirits of the fretfulness, the unreasonableness of sick children - not that I think it is greater than that of many sick adults - but it is more wearing because the strain is never off for a minute. These are the peculiarities of children's hospitals to be weighed before such are decided upon, shall you find sufficient nurses of this kind? (Nightingale, 1886, p. 36)

Therefore, her solution was to mix children with adults in order that "the woman in the next bed, if the patients are judiciously distributed, often becomes the child's best protector and the nurse".

(Nightingale, 1863, p. 68)

As early as 1854, West published a text entitled "How to nurse sick children". In it he states:

Cries are the only language which a young baby has to express its

distress. The baby must be ill is all that its cries tell one person; another who has seen much of sick children, will gather more, and will be able to judge whether its suffering is in the head, chest or stomach (p. 24).

The text was deemed necessary shortly after the Hospital for Sick Children opened in London. Although the standards for nursing staff were high, they had little training in the care of ill children. Miss Catherine Jane Wood, the hospital's superintendent, had a profound influence on the training of nurses to care for ill children. She devised a scheme of training pediatric nurses, the nucleus of which had been developed by Dr. Charles West. She is remembered as the nurse who established pediatric training in 1878 (Saxton, 1981).

As Nightingale (1863) stated, the nurse caring for ill children must possess a special temperament and talent. Wood (1878) saw the nurse as a "motherly figure to the sick children - as she believed children thrived on love" (Saxton, 1981, p. 6). The current literature supports many of these same characteristics. Ford and Berlinger (1971) believe caring is the foundation of pediatric nursing and therefore the major component of the pediatric staff nurse's role. They define caring as: "the personal expression of concern for and about another in a meaningful way. It is the giving of oneself in such a way that the person receiving the care knows that the one giving the care is concerned about him and what happens to him" (p. 94). This caring implies that the nurse becomes involved and empathizes with the child and his family (Rumfelt, 1980). Important to the pediatric nurses' role according to Fagin (1969) are: (1) support of parents

who are visiting and rooming-in, (2) care of children whose mothers do not stay in the hospital and (3) clarification with the child that the nurses' role is to assist and not replace the mother.

Rumfelt (1980) conducted a study to determine how five year old children perceive the role of the nurse. She postulated that nursing, much like other roles, is highly visible and subject to misrepresentation. She stated that people in general seem to be less acquainted with the caring and supporting components of the nursing role and tend to attribute the clinical aspects of the role to the nurse, such as taking a temperature. Within this context, Rumfelt reported three major findings: (1) children viewed the nurse as a person who could be identified by apparel, (2) children had knowledge of the nurturant quality of the nurses' role, and (3) children lacked the awareness that provision of opportunities for play was an integral part of the nurses' role.

According to Saunders (1981) a "sick children's nurse" has a very special role. Upon completion of her basic educational program, every nurse has developed beginning skills in (1) the observation and interpretation of behavior in children, (2) assessment of children, and (3) a realization of the immediacy of a child's world. The pediatric nurse, however, does not receive any preparation in the nursing care of children beyond this. Saunders stated that these are important because a child cannot clearly describe pain and often cannot describe why or how he is uncomfortable. A child indicates needs with an urgency that must be anticipated and evaluated by the pediatric nurse. Barchard

(1982) feels that along with observation and anticipation of needs, the nurse must have imagination and versatility in order to cope with the different requirements of children of various ages and developmental levels.

Glen (1983) and Patel (1983) highlighted the fact that communication creates and maintains an atmosphere of trust between the child and the nurse and between the parents and the nurse. However, many pediatric nurses continue to place great emphasis on physical assessment skills. This, according to Glen (1983) reflects a lack of interpersonal communication skills with the family. Communication is an essential, integral part of nursing (Patel, 1983; Glen, 1983; Nightingale, 1863). Often with young children non-verbal forms of communication, such as drawings, help identify possible problems, thus creating an effective means of communication.

What functions are inherent in the role of the pediatric staff nurse? Nursing functions, in general, as identified by the American Nurses' Association (A.N.A.) (1973), emphasize the elements of the nursing process, namely, (1) assessment, (2) identification of problems, (3) planning, (4) implementation of nursing intervention and (5) evaluation. Many others (Marlow, 1980; Scipien, Barnard, Chard, Howe, and Phillips, 1979; and Whaley and Wong, 1983) also base the pediatric staff nurses' functions in the nursing process. Despite this trend, according to Pidgeon and Sander (1982), there has been a shift of emphasis from task oriented, instrumental functions to expressive functions that respond to the emotional needs of children/families.

In a recent study conducted by Pidgeon and Sander (1982) the importance of pediatric nursing functions as perceived by pediatric staff nurses was examined. The researchers examined the pediatric nurses' perceptions in an attempt to determine if there were perceptual differences among the pediatric nurse in managerial, clinical and teaching positions. Pediatric nursing functions were categorized into seven areas. These areas were: (1) assessment, (2) teaching, (3) psychosocial care, (4) nursing process, (5) physical care, (6) interdisciplinary functioning and (7) assorted tasks. A questionnaire was developed which consisted of forty-three pediatric nursing functions. The purpose of the study was to elicit pediatric nurses' perceptions of the importance of each item on a 9-point ladder scale ranging from "highly important" to "not important at all." Pediatric nursing functions in all seven areas were perceived as important with the exception of those functions in the "assorted task" area. The data suggested that the role of the pediatric nurse was perceived as being broad in scope. The importance that was attached to each area gave rise to the question of whether or not a pediatric staff nurse could realistically perform all of these functions. The highest rated functions were in the following areas: (1) psychosocial care, (2) nursing process, and (3) assessment. In a concluding statement, Pidgeon and Sander (1982) stated that "nursing functions need to be critically examined...to determine which functions properly constitute pediatric nursing practice" (p. 130).

This investigation of pediatric staff nurse functions was one attempt to define clinical competency. In reviewing the literature

the issue of how much experience the pediatric nurse has was frequently addressed. As early as 1870, in the Hospital for Sick Children, "probationers" as the new, inexperienced nurses were called, were given "children to care for who needed only a novice's attention" (Saxton, 1981, p. 6). The pediatric nurse functions clearly reflected the amount of experience possessed by the nurse. For instance, "No nurse was able to do night duty until she had at least six months experience on the ward. Diphtheria and tracheostomy cases were always cared for by a probationer who had had at least three years nursing experience" (Saxton, 1981, p. 6). Plaxton (1982) stressed that young nurses with minimal experience of the emotional needs of children can often "ignore or misunderstand them, even though they deal perfectly with their medical progress" (p. ii). Saunders (1981) stated that the trained or experienced pediatric staff nurse can support and meet the needs of a very sick child or a terminally ill child "more ably" than a student nurse during her clinical experience or a graduate nurse in the first weeks of her new pediatric staff nurse position (p. 1494).

Are these authors stating then that experience in the clinical area is the major means of attaining clinical competency? Does the implication hinge on the fact that formal training in nursing theory and practice is the foundation upon which clinical competency is built? In this study, the investigator attempted to ascertain if there was a difference in the self-perceptions of clinical competency between new and experienced pediatric staff nurses. In addition, this researcher studied clinical competency as observed in pediatric staff nurses.

Clinical Competency

To learn, explore, and master are easily seen as the steps that lead to competency. Conceptually, clinical competency is a compilation of several factors, especially (1) personal and psychosocial characteristics, such as, self confidence, commitment, flexibility, autonomy and realism which are related to nursing practice; (2) knowledge and understanding of scientific, especially biochemical principles pertinent to nursing practice; (3) principles and conceptual models of nursing as a profession, and finally, (4) technical/manual nursing skills and abilities. Clinical competency is an "effectiveness" in a psychological sense, seen in the personal attributes of self-confidence, commitment, autonomy, flexibility and realism (Smith, 1966). Individuals are described as being competent if the standard level of nursing set by the nursing profession is met and surpassed. The best definition of competence was found in the writings of Johnson (1966), who stated that competence in patient care is found in knowledge and manifested in skill.

Many attempts have been made to define as well as evaluate clinical competency in numerous specialty areas. Medicine, Psychiatry, and Nursing as well as occupational career areas and educational systems have struggled with the development of a clear definition of clinical competency. Klemp (1980) in his assessment of occupational competence stated that "the kernel of competence lies in effective performance by an individual" (p. 4). He defined competency as a "characteristic of an individual that underlies effective work perfor-

mance" (p. 4). According to Klemp (1980), a competency can be any human quality, such as: knowledge, skill, a trait, self-schema or a motive.

In reviewing the clinical competencies interns actually implemented in practice, Newble (1979) categorized competence under nine major areas of clinical performance. They are: (1) history, (2) physical examination, (3) tests and procedures, (4) diagnostic acumen, (5) treatment, (6) judgement and skill in implementing care, (7) continuing care, (8) physician-patient relations and (9) responsibilities as physician. It was apparent that the majority of the competencies listed focus on technical and skill functions. The critical aspects of psychosocial competencies seem to be given less attention.

Chickerling (1969) has referred to competence as a "three-tined fork". He has identified its major components as: (1) intellectual competency (knowledge), (2) physical-manual competency (skill), and (3) interpersonal competency. As the "handle" of this "three-tined fork", in an attempt to hold all of these components together, a sense of competence is represented. In other words, without the feeling of competence (self-confidence) it would be difficult, if not impossible, to attain any of the three components of competency.

In order to review the concept of clinical competency thoroughly, this section of the review of the literature was separated into the following areas: intellectual, physical-manual and interpersonal competency (Chickerling, 1969).

Intellectual Competency

Intellectual competency is represented by the knowledge/theory that is obtained by the individual and utilized in the performance of given role functions. When speaking of knowledge, one must realize that in the field of nursing there are two distinct types of knowledge. These include scientific or theoretical knowledge, which has a sound base and is very difficult to dispute, and ineffable knowledge, as stated by Benner and Benner (1979) which is knowledge that cannot be made explicit. It is ineffable knowledge that comes from extensive clinical practice. Therefore, there is a tendency to discount ineffable knowledge because the rationale for it cannot be clearly stated and it cannot be reduced to behaviorally stated objectives (Styles, 1975).

In striving for a sound base of scientific knowledge, nurses have tended to discount ineffable knowledge which, according to Benner and Benner (1979) "is the heart of any clinician's problem-solving capabilities" (p. 30). This is further exemplified by Polanyi (1958):

Although the expert diagnosticians...can indicate their clues and formulate their maxims, they know many more things than they can tell, knowing them only in practice, and as instrumental particulars, and not explicitly as objects. The knowledge of such particulars is therefore ineffable, and the pondering of a judgement in terms of such particulars is an ineffable process of thought. This applies equally to connoisseurship as the art of knowing and to skills as the art of doing. Therefore, both can be taught only by aid of practical example and never solely by precept (p. 88).

It is the belief of Benner and Benner (1975) that, "if nursing is to be true to its own inner logic, it must attend to the richness that

can be drawn from its technology and practice as well as to that which it draws from its developing scientific knowledge". (p. 30). In the context then of intellectual competency, it is essential that both scientific and ineffable knowledge be utilized in the clinical setting.

Physical-Manual Competency

Physical-manual competency is that performance which is manifested in skill. The areas of pediatric nursing practice that constitute this competency can be thought of in a functional sense. Physical care functions probably constitute the majority of the skill. According to Pidgeon and Sander (1982), the physical care functions include: performances of procedures, administration of medications, maintenance of medical regimens, physical care, and care of special equipment. However, these functions were given less emphasis in the Pidgeon and Sander study than "expressive", interpersonal functions received. The five functions that were perceived to be the most important by pediatric staff nurses, as reported in the Pidgeon and Sander study, are listed in order of importance: (1) providing emotional support to children; (2) recognizing and reporting significant physical deviations; (3) implementing nursing interventions; (4) preparing children psychologically for procedures and surgery; and (5) identifying nursing problems (p. 127). It is significant that although many people think of the functional, manual tasks associated with nursing, pediatric nurses frequently place greater importance on the interpersonal aspects of their role than on the technical skills expected of them.

Although the pediatric staff nurse perceives one area of practice as more important than another, it must be remembered that the Pidgeon and Sander study revealed that every scope of pediatric nursing was perceived as important by nurse respondents. A conclusion may be that each unique area of pediatric nursing is highly dependent upon another, and in order for a pediatric nurse to obtain clinical competency, she must have expertise in all areas of pediatric nursing.

Interpersonal Competency

Interpersonal competency is that area of pediatric nursing that constitutes psychosocial functions, teaching functions and interdisciplinary functions. Good communication is an integral part of nursing (Patel, 1983). Psychosocial functions, as cited by Pidgeon and Sander (1982), include the provision of emotional support to parents, and the preparation of children for procedures and surgery. Strengthening parents' coping resources has also been frequently cited (Marlow, 1977; Scipien et al, 1975; Whaley and Wong, 1979). Teaching functions have been included probably because of the key role good communication and rapport play in effective teaching. The teaching function would include health education of parents and children, anticipatory guidance, and parent counseling (Marlow, 1977; Scipien et al, 1975; Whaley and Wong, 1979). Interdisciplinary functions were defined in the Pidgeon and Sander study as collaborating with health team members and initiating referrals and providing information about community resources (Pidgeon and Sander, 1982).

When referring to communication, it must be remembered that verbal as well as non-verbal behaviors are addressed. In a study conducted by DeChristopher (1981), it was found that:

The correlation between the facial expression on the child and the expression on the practitioner's face gave vital clues of these children's feelings. The pattern of smiling practitioner and frowning patient is most evident in the drawings done by the older children. It seems that the children may misinterpret the practitioner's attempt to maintain a cheerful atmosphere as a denial of their own unhappiness (DeChristopher, 1981, p. 10).

As effective communication is essential with the pediatric patients, "the need for good, sound communication with the parents is imperative" (Patel, 1983, p. 29). The importance of interpersonal competency can readily be seen. It must be realized that in pediatric nursing the attainment of interpersonal competency is equally as important as intellectual and physical-manual competency.

Self-Perceptions of Clinical Competency

Self-perceptions of clinical competency can be defined as the way in which the nurse, using her senses and her mind, comprehends data about her own ability to function in a particular setting. She understands or intuitively recognizes the quality of the care she renders. It is important that when considering self-competency in terms of nursing functions, the nurse should include all aspects of the client's biological, psychological, and sociological self. This is not to say that clinical competency includes only the direct care of the client. Direct nursing care is one part of nursing care; indirect nursing care is another aspect of care. Indirect nursing care is that which is performed away from the patient but in his behalf (Kreuter,

1957), such as contacting the Visiting Nursing Service upon discharge of a chronically ill child. Nursing care is only one component of nursing practice. Other components of nursing practice are: coordinating nursing care with the care of the medical and allied services; planning for continuity of care outside of the hospital setting; evaluating total patient care; and directing the family and the nursing auxiliary as they give nursing care. One may question whether nurses' perceptions of their role include an evaluation of both direct and indirect nursing care--and then, how pediatric nurses perceive the level of skill they personally bring to each function of the nursing role.

Although little has been written about the self-perceptions of the pediatric staff nurses' clinical competency, the following study revealed data that was pertinent to the present project. Zahara-Such and her associates (1981) explored pediatric nurses' perceptions of clinical competency and nurses' perceptions of the adequacy of their educational preparation to function in the clinical setting after having completed their basic educational program. The 45 pediatric staff nurses' self-perceptions of clinical competency were compared to the nurses' supervisor's evaluations of competency.

A clinical competency scale, which was composed of two parts, was developed for use in this pilot study. Seven open-ended questions relating to the nurse's perceptions of her own clinical competency were administered in an interview setting and constituted Part I of this tool. In Part II, the subjects were asked to rate their clinical competency in five areas of functioning, i.e., physical care and manual

skills, interpersonal relationships, leadership, decision making and community health care. Responses to this instrument were analyzed using a Chi square technique.

The Zahara-Such, Burtis, Lynch and Sweeney (1981) data revealed that the major areas of emphasis in terms of clinical competency as perceived by the staff nurse subjects were the physical care and manual skills aspects of pediatric nursing. Pertinent to the present study was the fact that the staff nurses "self-perceptions regarding clinical competency were generally accurate as validated by an objective source, the supervisor, who utilized the same tool" (Zahara-Such, et al, 1981, p. 38). In other words, there was a significant level of consistency between the nurses' self-perceptions of their own clinical competence and the perceptions of the supervisors who were responsible for the pediatric staff nurses who participated in the study. Based on these data, it may be assumed that new graduates and experienced pediatric staff nurses responses of self-perceptions of clinical competency gave some indication of the actual clinical performance of pediatric staff nurses. A lack of specificity in the Zahara-Such tool was obvious; therefore, a different instrument was utilized in the present study, which enabled the researcher to pinpoint the specific functions and skills in which the pediatric staff nurse must feel competent. The Benner Proficiency Scale (BPS) is an instrument that seems generalizable to all types of nursing care, yet contains a degree of specificity that can be identified in a particular area of clinical competency.

Measurement of Clinical Competency

In 1979, Benner conducted a study which involved the systematic evaluation of the clinical competencies and the job-finding and work-entry experiences of newly graduated nurses. The evaluation of the clinical competency portion was extremely pertinent to the present study. The tool developed by Benner and Benner and utilized in the 1979 study is called the Competency Appraisal Scale for Nursing Skills. It consists of 113 statements describing nursing skills and activities that nurses perform in various adult care settings. One of the key factors in this study was the categorization of five levels of clinical competency. They are:

Level 1	Complete Mastery:	Able to perform competently and efficiently without supervision.
Level 2	Competent:	Able to perform without supervision with reasonable efficiency.
Level 3	Safe, but practice needed:	Able to perform without supervision, but more practice is needed in order to perform efficiently.
Level 4	Supervision needed:	Understands the theory and principles but would need supervision because of limited practice or experience.
Level 5	Supervision and instruction needed:	Was not introduced to the theory and principles and would need both instruction and supervision to perform the skill (Benner and Benner, 1979, p. 127).

These levels provided a framework for the evaluation and identification of the pediatric staff nurse's self-perception of actual clinical competencies.

Dreyfus (1981) in his "Model of Skill Acquisition," developed a tool to categorize the levels of competency in skill acquisition. Benner has generalized the Dreyfus model to nursing. According to Benner (1982a), this instrument "takes into account increments in skilled performance based upon experience as well as education. It also provides a basis for clinical knowledge development and career progression in clinical nursing" (p. 402). The levels of proficiency that one passes through in the acquisition and development of a skill, according to Dreyfus (1980) are: novice, advanced beginner, competent, proficient and expert.

The Dreyfus levels of proficiency can be directly related to Benner's five levels of clinical competency. The comparison is as follows:

Complete mastery_____	Expert
Competent_____	Proficient
Safe, but practice needed_____	Competent
Supervision needed_____	Advanced Beginner
Supervision and instruction needed_____	Novice

As aptly stated by Benner (1982a), "The Dreyfus Model of Skill Acquisition, applied to nursing and combined with an interpretive approach to describing nursing practices, offers guidelines for career and for knowledge development in clinical nursing practice" (p. 407). Thus, it becomes crucial for nursing practice to be defined and even further for the individual nurses' self-perceived level of clinical competency to be clearly delineated in order for personal and professional develop-

ment to occur.

Benner (1982a) stated that "increased acuity levels of patients, decreased length of hospitalization, and the proliferation of health care technology and specialization have increased the need for highly experienced nurses" (p. 402). She also stated that this "complexity requires a life-long commitment to learning and an understanding of the differences between the experienced nurse and the novice" (Benner, 1982b, p. 304). Experience plays a key role in the skill acquisition of pediatric staff nurses. As Benner (1982a) stated, experience is not longevity or a passage of time, but rather "the refinement of preconceived notions and theory by encountering many actual practical situations that add nuances or shades of differences to theory" (Benner, 1979, p. 83). Because experience is such an integral factor in the definition of clinical competency, an attempt was made in the present study to compare the self-perceptions of clinical competency of new pediatric staff nurses to that of experienced pediatric staff nurses--in order to identify the clinical competencies of pediatric staff nurses at various levels of experience.

Summary

The works of Benner (1975, 1979, 1981, 1982) remain the most significant contribution found in the literature with respect to the present study. The Benner research has been utilized particularly in defining the clinical competencies of pediatric staff nurses. The paucity of instrumentation with which to measure nursing clinical competency in general, and pediatric nursing competency in particular,

was also apparent after a careful review of pertinent literature.

CHAPTER III

DESIGN OF STUDY

In order to answer the research questions posed in this study, a descriptive self-report methodology was employed. This chapter has been organized using the following sub-headings: setting, subjects, instrumentation, collection of data, and summary.

Setting

The setting was a 265-bed pediatric hospital. It is located in a metropolitan area of a large midwestern city, and services people of every race and socioeconomic status. The nursing department consists of many young nurses, originally from out-of-state and from Illinois. Many seek employment in a highly specialized and well-known hospital where they can attain specialized nursing experiences which will allow them to develop expertise in the care of infants and children.

An interview was sought with a hospital nursing administrator (Appendix B) in order to explain this research project and seek her cooperation and direction with regard to the appropriate steps necessary to implement this study. The study was also submitted to the Institutional Review Board of the University and to the Nursing Research Committee of the hospital for approval.

Subjects

Pediatric staff nurses who are new, that is, those with one

year of clinical experience or less, and experienced, those with three years of clinical experience or more, were selected from the nurses working in the department of nursing. A total of 40 experienced nurses and 23 new graduates met the following criteria: (1) a Bachelor of Science Degree in Nursing; (2) one year or less clinical experience for new graduate nurses and three years or more clinical experience for experienced nurses, and (3) employment as a pediatric staff nurse. A random selection procedure was not possible (1) due to the lack of subjects who met the specified criteria for participation and (2) because many who were eligible to participate chose not to do so. Twenty-five experienced pediatric staff nurses and 15 new graduate pediatric staff nurses responded to the questionnaire. The limited number of new graduate nurses was due to the small number of new graduates hired within the past year.

The age span of the subjects is described according to the categories specified in the demographic portion (Part II) of the BPS, (i.e., "under 23 years," "24-29 years" and "30-39 years"). Among the new graduates, 11 or 73% of the group were in the "under 23 years" group while among the experienced nurses, 18 or 90% of the group were in the "24-29 years" group. The new graduate nurses had just taken the state board examinations when the data were collected, but did not know the results; the experienced pediatric staff nurses had already passed the state board examinations.

Cooperation of the Staff Nurse Specialists was sought during the initial selection of the subjects. After the identification of the

TABLE 1

Age of Subjects

<u>Years</u>	<u>Staff Nurses</u>	
	<u>New</u>	<u>Experienced</u>
Less than 23	11	0
24-29	2	18
30-39	2	2

potential subjects, this investigator requested assistance from a nurse in the Nursing Staff Development Department and from the Staff Nurse Specialists. It was thought that this investigator may have known some of the subjects personally, therefore, every attempt was made to assure that anonymity was maintained and that no pressure to participate in the study was placed on the subjects. Consequently a nurse who was not involved in the development of the proposed study approached each subject individually to request the subject's participation. If the nurse could not be contacted individually, the questionnaire was left in her mailbox, and she was asked to return it in the inter-office mail. Each subject received a letter (Appendix C), a general information sheet (Appendix D), as well as instructions (Appendix A) and the BPS tool (Appendix A). Completion of the instrument indicated that the new or experienced nurse agreed to participate in the study. In order to assure anonymity, each participant was asked to place no identifying marks on the tool. For purposes of data analysis, the tools were coded with an identifying number and an "A" for the new graduate nurse and a "B" for the experienced pediatric staff nurse.

Instrumentation

The Benner Competency Appraisal Scale was originally developed for use in a study of new graduate nurses in San Diego and Imperial Counties, California (Benner and Benner, 1975). The study involved a systematic evaluation of the competencies of newly graduated nurses. The data obtained from the study provided a basis for an updated and

shortened scale which was presented in 1978 and renamed the Benner Proficiency Scale (BPS). The BPS was updated and shortened based upon a cluster analysis of the data obtained in the original study. As a result of the cluster analysis, the original 113-item scale was reduced to 80 items. This revised 80-item instrument was submitted to a panel of expert nurse clinicians for a critical review of the "representativeness and comprehensiveness of the revised instrument" (Benner, 1979, p. 1).

The BPS was then administered to 131 new graduates and 119 nurse educators, and a factor analysis was conducted on the ideal scores of these two samples. Based on the factor analysis the scale was further reduced from 80 to 60 items, culminating in the current form of the scale which was utilized for the present study (see Appendix A).

In 1975, a degree of content validity was achieved by means of an examination of the instrument by a group of nurses in the San Diego area. In addition, a factor analysis was carried out leading to an identification of seven categories or factors apparent in the BPS. These factors are: (1) Safety Orientation, Prevention of Iatrogenic Illness; (2) High Technical/High Risk Clinical Judgement Required; (3) Helping Role Skills, High Level Interpersonal Relations; (4) Medium Technical; (5) Work Role Skills, Basic Nursing Skills; (6) Leadership Skills, Team Orientation, and (7) Practitioner Skills, Diagnostic Orientation (Benner, 1982c).

It was reported that Factor 1 (i.e., Safety Orientation, Pre-

vention of Iatrogenic Illness) is found in 21 items and is characterized by emphasis on safety and maintenance. It is important to note that 20 of the 21 items were judged by expert nurses to be central to nursing practice. This first factor accounts for 12% of the variance. Factor 2 (i.e., High Technical/High Risk Clinical Judgement Required) accounts for 10% of the variance and consists of 16 items. Factor 3 (i.e., Helping Role Skills, High Level Interpersonal Relations) also accounts for 10% of the variance and consists of 16 items. Factor 4 (i.e., Medium Technical) accounts for less variance, that is, approximately 5%. It consists of 11 items. These first four factors account for the largest portion of the variance and all seven are of interest since the remaining three have "face validity, are concrete, real work performance items, and are not measuring an underlying construct" (Benner, 1982c, p. 9).

A concurrent validity study was implemented by Ellington correlating responses to the Corwin Professional Bureaucratic Role Deprivation Scale and the BPS with a subject group of graduate nurses. Little has been published about this study; specific coefficients are not available, however, Benner (1982c) reported this study as establishing a measure of concurrent validity (p. 9).

Predictive validity was claimed by Weiss in a study, as reported by Benner (1982c), that used the BPS as a pre-test and post-test measure for a control and an experimental group taking a specialized new graduate orientation program. There were no significant differences found between

the two groups on the pre-test scores. There was a significant decrease in the discrepancy scores for the experimental group six months post participation in the orientation program. None were found in the control group. These findings indicate that "the BPS is sensitive to decrease in conflict between ideal and real performance expectations based upon increased skill mastery" (Benner, 1982c, p. 9).

Additional concurrent and predictive validity studies are currently underway. Atwood (1981) has recently completed a doctoral dissertation utilizing the BPS tool but the report of this research is unavailable at the present time.

The reliability of the BPS tool was sought utilizing a split-half test of internal consistency. It was performed using every other item on the BPS. The correlation coefficient for the two halves ranged from .934 to .942. Therefore, it appeared that the items on the tool provide consistency of test results.

In its current form, the BPS consists of two parts, they are: (I) Performance Expectations and (II) Demographic Information. Part I consists of 60 items focused on aspects of clinical competency. Part II consists of 11 items developed to obtain demographic data such as age, number of years involved in direct patient care, etc. (see Appendix A).

The 60 item BPS tool focuses on various aspects of the nursing role. The items are generalizable to multiple areas of clinical specialization and include skills in each of the three identified components of competency, that is, intellectual, physical-manual, and

interpersonal capabilities. The subjects were asked to respond to the individual items within the context of pediatric nursing. The respondents reacted to each item as they perceived their clinical performance within the five levels of competency identified by Benner.

The five levels of competency in descending order are:

1. High Proficiency: Able to perform competently and efficiently without supervision.
2. Moderate Proficiency: Able to perform without supervision with reasonable efficiency.
3. Safe, but Practice Needed: Able to perform without supervision, but more practice is needed in order to perform efficiently.
4. Supervision Needed: Understands the theory and principles, but would need supervision because of limited practice or experience.
5. Supervision and Instruction Needed: Was not introduced to the theory and principles and would need both instruction and supervision to perform the skill.

The instrument was completed by the subjects who received the introductory letter (Appendix C), general information (Appendix D) and the instruction sheets (Appendix A). It should be noted that this instrument was being used for the first time to identify levels of proficiency as perceived by pediatric staff nurses.

In responding to the BPS, the subjects were asked to respond to both the "ideal" and to the "real" responses. The "ideal" was defined in terms of how they thought a pediatric staff nurse should

function and the "real" was defined in terms of how they perceived their own performance in providing nursing care to pediatric patients. Only the "real" responses were used in responding to the research questions posed in the present study.

Collection of Data

The research packet, which included the BPS was given to the new and experienced staff nurses individually in the pediatric unit in which they were working. The subjects were free to complete the tool in a convenient location. Some of the participants took the instrument home while others completed it in the hospital. Therefore, the environment in which the data were collected was not controlled. It approximately 15-30 minutes for the nurses to respond to the BPS.

Summary

The setting for this study was a 265-bed urban center, specializing in the care of children. Twenty-five experienced and 15 new graduate pediatric staff nurses participated in the project. An accidental sample of subjects was utilized, and subjects were approached individually by a nurse who had not been involved in the conceptualization of the study. The Benner Proficiency Scale (BPS), which provides a rating of clinical competency and focuses on various aspects of the nursing role, was used as a means of data collection.

CHAPTER IV

ANALYSIS OF DATA

Data analysis involved a review of the responses to each of the 60 items in the Benner Proficiency Scale (BPS). The new and experienced licensed pediatric staff nurses' responses were studied together and separately. The subjects' responses to the BPS were manifested in one of the five categories or levels for each item. The responses constituted ordinal data, indicating that there was a qualitative order or classification system utilizing categories from Level 1, "high proficiency" to Level 5, "supervision and instruction needed."

Polit and Hungler (1978) might assign a numerical value to categorize responses and analyze the data using non-parametric and parametric techniques. Such an approach was not used in the present study for two reasons: (1) the differences between the five response categories or levels were variable, and (2) the focus in this project was exploratory, i.e. to assess pediatric staff nurses' perceptions of clinical competency and the feasibility of using the BPS in Pediatric Nursing.

The data in this study were reported in percentages of subject responses to each item at each level (Appendix E) for the entire group of 35 subjects. The data were also reported in percentages of responses to each item at each level of each sub-group, i.e., (1) the new graduate nurse (n = 15) responses and (2) the experienced nurse (n = 20) responses (Appendix E).

The research questions explored in the present study were considered separately and analyzed qualitatively.

Research Question 1: What are pediatric staff nurses' self-perceptions of clinical competency?

Subjects' Self-Perceptions of "High Proficiency"

In responding to this question, the responses from the 35 subjects were examined. As a group, the pediatric staff nurses perceived themselves as having "high proficiency" in 33 items. The highest percentage of responses occurring in Level 1, "high proficiency," were considered to be the items or areas in which the group saw themselves as most competent. In some items as few as 26% of the nurses' responses were observed in this category, i.e., "high proficiency." Those items in which the subjects reported the highest percentage of competence follow:

1. Turn and position a patient in bed	83%
41. Use isolation techniques correctly e.g., hand washing, gowning, and gloving	83%
35. Place electrodes on patients for cardiac monitoring	80%
25. Notify appropriate physician about significant changes in patient's condition	77%
23. Insert naso-gastric tube	74%
29. Give gastric tube feedings	74%
52. Evaluate P.R.N. medications so patients are not undermedicated or overmedicated	71%
60. Judge changes and trends in infant's hydration by palpation of fontanel	71%

It may be noted that all but one of the above could be classified as physical-manual skills, the exception being number 25, which can be classified as an interpersonal competency.

Subjects' Self-Perceptions of Low Competency

In order to identify those skills in which the respondents viewed themselves as "needing supervision" or as "needing supervision and instruction," the percentage from responses categories in Level 4, i.e., "supervision needed" and Level 5, i.e., "supervision and instruction needed" were added. These include:

	<u>Level 4</u>		<u>Level 5</u>	
15. Measure central venous pressure .	37%	+	46%	= 83%
54. Predict the influence of physiological responses, such as shivering, on Central Venous Pressure readings.	28%	+	49%	= 77%
28. Instruct patient on how to detect pacemaker failure.	51%	+	23%	= 74%
14. Assess the stages of labor during the childbirth process.	51%	+	17%	= 68%

Of the four items perceived to need supervision and instruction, only one, i.e., item number 15 represents physical-manual skill. The remaining three items could be categorized as intellectual competency or knowledge.

Subjects' Self-Perceptions of "Safe" Competency

Finally, as a group, the respondents claimed that they were "safe" practitioners but "needed practice" in 12 items. These activities or items were identified by this researcher if (1) the largest percentage of responses were reported in Level 3, i.e., "safe, but practice needed" or if (2) the percentage in Level 3 was greater than

a combined percentage score of Level 1, "high proficiency" and Level 2, "moderate proficiency" on the "competent" end of the continuum, or, if the percentage in Level 3 was greater than a combined percentage score of Level 4 "supervision needed" and Level 5 "supervision and instruction needed" on the "less competent" end of the continuum. In this latter case, a characteristic of the responses over the five categories was one of wide variation or "spread" across all possible answers.

These included:

16. Communicate therapeutically with emotionally disturbed patients	57%
17. Carry out role and responsibilities of team leader	11%
24. Help patients break down the management problems of chronic illness into workable units	43%
30. Help families choose a mutually satisfying level of participation in caring for the dying patient	37%
32. Detect major dangerous cardiac arrhythmias on cardiac monitors	37%
38. Detect signs and symptoms of acute pulmonary edema	26%
39. Coach the patient in pain management techniques	34%
43. Teach stoma care to ileostomy patients	37%
47. Check arteriovenous shunts for patency and flow	40%
49. Prepare and administer sliding scale insulin	23%
50. Detect signs and symptoms of digitalis toxicity	34%
55. Start intravenous fluids	23%

It may be noted that of these 12 items perceived as "safe, but practice needed," there are four in each of the three factors of clinical competency. That is, these items are evenly represented in physical-manual competency (skill), i.e. number 39, 47, 49, and 55, in intellectual competency (knowledge), i.e. number 32, 38, 43, and 50, as well as in interpersonal competency, i.e. number 16, 17, 24, and 30.

Research Question 2: What is the feasibility of using the BPS in the pediatric setting?

This factor was explored in a review of the subjects' responses to the instrument. The following findings were noted:

- (1) All of the respondents answered all of the items with one exception. One experienced nurse omitted item number 14. In tallying subject responses, an average score was used as a response for this item.
- (2) No questions were asked by the subjects during the time in which the data were being collected. Therefore, it was apparent that the items were understandable to the pediatric nurse respondents, and that they thought it was appropriate to respond to each item.
- (3) Consistently the same items ranked very low, i.e. in the fourth or fifth categories, "supervision needed" and "supervision and instruction needed." Those items were:
 14. Assess the stages of labor during the childbirth process
 15. Measure central venous pressure
 28. Instruct patient on how to detect pacemaker failure

47. Check arteriovenous shunts for patency and flow
54. Predict the influence of physiological responses, such as shivering, on Central Venous Pressure readings

One might question the feasibility of retaining these items in the BPS when using the instrument to obtain data from pediatric staff nurses.

- (4) It was observed that the experienced pediatric staff nurses consistently rated themselves higher than the new graduate pediatric staff nurses for proficiency or competency in 30 items or 50% of the items in the BPS tool.

It seems then that the instrument can be used as a means of measuring self-perceived clinical competency in pediatric staff nurses.

Research Question 3: Do differences exist between the new graduate's self-perceptions of clinical competency in Pediatric Nursing and the experienced nurse's self-perceptions of clinical competency in Pediatric Nursing as revealed in the subject's responses to the BPS?

Differences in Level 1, "High Proficiency"

The data utilized to address this final research question were compiled in percentages (Appendix E) of responses obtained from the subjects in each of the two sub-groups, i.e., (1) the new graduates, $n = 15$, and (2) the experienced nurses, $n = 20$. Outstanding differences were noted. First, it would be difficult to list all the items in which the two sub-groups differed. Therefore, only those items in which at least 80% of the respondents from either sub-group chose the "high proficiency" category are listed (see Table 2). Eighty percent of

TABLE 2

Subject's Responses of Level 1, "High Proficiency"

<u>New Graduate Nurses</u>	<u>Experienced Nurses</u>
1. Turn and position a patient in bed (80%)	25. Notify appropriate physician about significant changes in patient's condition (100%)
	29. Give gastric tube feedings (95%)
	35. Place electrodes on patients for cardiac monitoring (95%)
	41. Use isolation techniques correctly e.g., hand washing, gowning, and gloving (90%)
	1. Turn and position a patient in bed (85%)
	21. Observe for reactions and complications with blood transfusions (85%)
	23. Insert naso-gastric tube (85%)
	8. Prepare and give oral meds to groups of patients (80%)
	22. Give tracheostomy care, including dressing change (80%)
	40. Provide for the safety needs of patients having seizures (80%)
	52. Evaluate P.R.N. medications so patients are not undermedicated or overmedicated (80%)
	53. Assist with a spinal tap (80%)
	60. Judge changes and trends in infant's hydration by palpation of fontanelles (80%)

the new graduate nurses perceived themselves as proficient in only one area. Among the experienced pediatric nurses, perceptions of proficiency were reported in 13 items, with all of the experienced nurses indicating that they were competent to "Notify appropriate physician about significant changes in patient's condition" (number 25). This response from the experienced nurses was the only incidence in this study of 100% agreement among the respondents in one sub-group to a particular item.

Second, in 47 of the 60 items the experienced staff nurses rated themselves as having "high proficiency" at a greater percentage than the new graduate nurses. In 13 of the 60 items, the new graduate nurses rated themselves as having "high proficiency" at a greater percentage than the experienced pediatric staff nurses. That the "new" nurses might perceive themselves as competent in items in which the experienced nurses reported themselves to be less proficient was surprising. Those items in which the new graduate pediatric staff nurses felt more competent (see Table 3) included ambulating post-operative patients for the first time after surgery and completing daily assignments within regular working hours. It should also be noted that the percent differences were as small as 2% and as large as 13%. Also, when combining the responses of Levels 1 and 2, on the same items, the differences between the two groups of nurses were minimal. Differences in Level 4, "Supervision Needed" and in Level 5, "Supervision and Instruction Needed"

In contrast to the many differences noted at Level 1, i.e., high

TABLE 3

Items in Which New Graduate Nurses Reported a
Higher Level of Proficiency than Experienced Staff Nurses
of Level 1, "High Proficiency"

<u>Item</u>	<u>New</u>	<u>Experienced</u>
3. Ask for assistance in completing assignment when needed	53%	45%
4. Ambulate post-operative patients for the first time after surgery	53%	50%
13. Complete daily assignment within regular working hours (excluding emergencies or staff shortages)	46%	40%
16. Communicate therapeutically with emotionally disturbed patients	13%	10%
24. Help patient break down the management problems of chronic illness into workable units	7%	5%
38. Detect signs and symptoms of acute pulmonary edema	33%	20%
39. Coach the patient in pain management techniques	20%	10%

proficiency" there were few differences noted at the low competency end of the continuum. There were only six items in which the new and experienced pediatric staff nurses differed greatly. In three items, listed below and identified with an asterisk, the new graduates rated themselves as slightly more competent than the experienced pediatric staff nurses. The six items which represent the areas in which both groups of nurses perceived themselves to be less competent are listed as follows:

	<u>Level 4</u>		<u>Level 5</u>	
	"Supervision Needed"		"Supervision and Instruction Needed"	
	<u>New</u>	<u>Experienced</u>	<u>New</u>	<u>Experienced</u>
5. Do colostomy irrigation	46%	5%	6%	5%
10. Do closed chest massage for patient requiring resuscitation	26%	5%	7%	0%
*15. Measure central venous pressure	53%	25%	20%	65%
17. Carry out role and responsibilities of team leader	46%	0%	7%	0%
*47. Check arterio-venous shunts for patency and flow	7%	35%	26%	25%
*54. Predict the influence of physiological responses, such as shivering, on Central Venous Pressure readings	33%	25%	33%	60%

Of the six items, only one (number 17) may be classified as an interpersonal skill. The remaining five items (numbers 5, 10, 15, 47 and 54) are all reflective of cognitive or intellectual functions of the role.

Similarities in Level 1, "High Proficiency"

Finally, similarities were observed in the responses obtained from the new graduate subjects and the experienced pediatric staff nurse subjects. The similarities were identified in Level 1, i.e., "high proficiency" (Table 4) when there was a 5% or less difference in the responses of the two groups. Of these items, six (numbers 1, 4, 28, 47, 49 and 55) could be identified as physical-manual competencies; two (numbers 44 and 59) could be identified as intellectual; and four (numbers 7, 16, 24, and 36) could be identified as interpersonal competencies.

Similarities in Level 5, "Supervision and Instruction Needed"

Similarities were also noted on the less competent end of the continuum, that is, at Level 5, "supervision and instruction needed." These similarities were identified when there was a 5% or less difference in the responses of the two groups (Table 5). Of these items, four (numbers 5, 39, 47 and 49) could be identified as physical-manual competencies; only one (number 18) could be identified as an intellectual competency; and three (numbers 16, 30 and 42) could be identified as interpersonal competencies.

Summary

In conclusion, it seems that this sample of pediatric nurses

TABLE 4

Similarities of Responses Between Experienced and New
Pediatric Staff Nurses of Level 1, "High Proficiency"

<u>Item</u>	<u>Experienced</u>	<u>New</u>
1. Turn and position a patient in bed	85%	80%
4. Ambulate post-operative patients for the first time after surgery	50%	53%
7. Contribute to productive working relationships with other health team members	45%	40%
16. Communicate therapeutically with emotionally disturbed patients	10%	13%
24. Help patient break down the management problems of chronic illness into workable units	5%	5%
28. Instruct patient on how to detect pacemaker failure	0%	0%
36. Ensure that the dying patient is not abandoned	45%	46%
44. Take nursing histories that guide the provision of individualized patient care	25%	20%
47. Check arteriovenous shunts for patency and flow	5%	0%
49. Prepare and administer sliding scale insulin	15%	13%
55. Start intravenous fluids	25%	26%
59. Observe for and prevent circulatory problems for patients with orthopedic casts	45%	45%

TABLE 5

Similarities of Responses Between Experienced and New
Pediatric Staff Nurses of Level 5,
"Supervision and Instruction Needed"

<u>Item</u>	<u>Experienced</u>	<u>New</u>
5. Do colostomy irrigation	5%	6%
16. Communicate therapeutically with emotionally disturbed patients	5%	0%
18. Convert medication dosages and units appropriately for children	5%	0%
30. Help families choose a mutually satisfying level of participation in caring for the dying patient	5%	7%
39. Coach the patient in pain management techniques	5%	0%
42. Help patients take responsibility for their own health	5%	0%
47. Check arteriovenous shunts for patency and flow	25%	26%
49. Prepare and administer sliding scale insulin	15%	13%

perceive themselves as most competent in physical-manual skills such as turning and positioning a patient in bed, using isolation techniques correctly and placing electrodes on patients for cardiac monitoring. In addition, in the present study, the respondents answered all the items in the BPS without questions or apparent difficulty. Finally, the major differences in the responses to the BPS from the two subgroups, i.e., new graduate and experienced pediatric staff nurses, have been identified. In general, the experienced nurses perceived themselves as more competent than the new graduate nurses in 47 of the 60 nursing activities.

CHAPTER V

CONCLUSIONS

In order to explore the self-perceptions of clinical competency in new and experienced pediatric staff nurses, 15 new graduate pediatric staff nurses and 20 experienced pediatric staff nurses who met specific selection criteria were chosen and agreed to participate in this study. The Benner Proficiency Scale (BPS) was used to obtain a measure of clinical competency. The research questions explored in the present study were considered separately and analyzed qualitatively.

The BPS is an instrument which allows the respondent to identify one of the five levels of performance with respect to a particular item. For example, item number one is stated as follows: "Turn and position a patient in bed." To this stimulus, the subject may respond by checking Level 1 "High proficiency", Level 2 "Moderate proficiency", Level 3 "Safe, but practice needed", Level 4 "Supervision needed", or Level 5 "Supervision and instruction needed".

While most professional nurses would ideally wish to see all nurses respond on Level 1, this response would not be realistic. The more appropriate expectation would be that the new graduate pediatric staff nurses who participated in this study would, as a general rule, respond at Level 3, i.e., "safe, but practice needed" and that the experienced pediatric staff nurses would respond at Levels 2 and 3, i.e., "moderate proficiency" and "safe, but practice needed." It

would not be surprising if a small percentage of experienced nurses perceived themselves as having "high proficiency". As Benner (1982a) has aptly stated, "experience is not the mere passage of time or longevity; it is the refinement of preconceived notions and theory by encountering many actual practical situations that add nuances or shades of differences to theory" (p. 407). It is important that the reader understand that these are the expectations in the mind of the investigator as the data obtained in this study are discussed in relation to the research questions posed in Chapter I.

It is also important to keep in mind that within the specialty area of Pediatric Nursing there are many sub-specialties. For example, nurses working in Pediatric Intensive Care and Neonatal Intensive Care as well as in Pediatric Medical and Surgical sub-specialties are all considered pediatric nurses. Within these sub-specialties a pediatric nurse may acquire a diversity of roles and functions. Consequently, a nurse who works in the Pediatric Intensive Care unit may respond differently to a specific item than a nurse who works in a Medical unit. For example, item number 15, "Measure central venous pressure" is unique to intensive care settings. Therefore, responses to this item reported by a majority of the subjects in this study were concentrated toward the low competency end of the continuum. That is to say the ability to competently measure central venous pressure may be specific to nurses in intensive care settings and may not be generalizable to all pediatric nurses.

Research Question 1: What are pediatric staff nurses' self-perceptions of clinical competency?

In discussing this question, the data obtained from the total group (n = 35) of new and experienced pediatric staff nurses were considered. The items in which the pediatric staff nurses perceived themselves as having "high proficiency" are revealing. Of the eight most outstanding items all but one item could be classified as physical-manual competency (skill). The respondents perceived themselves as highly competent in turning and positioning a patient in bed, using isolation techniques correctly, placing electrodes on patients for cardiac monitoring, inserting naso-gastric tubes, giving gastric tube feedings, evaluating P.R.N. medications and judging changes and trends in infant's hydration by palpation of fontanel. The one item that was the exception was number 25, "Notify appropriate physician about significant changes in patient's condition." This item may be classified as an interpersonal competency. It seems that the pediatric staff nurses in this study perceived themselves as competent practitioners especially in seven physical-manual skills. In addition, they claimed skill in identifying problematic symptoms and knowing when to refer patients to the appropriate physician.

On the opposite end of the continuum where pediatric staff nurses perceived themselves as "needing supervision" or as "needing supervision and instruction," there were four outstanding items. In this case, all but one item represented intellectual competency (knowledge). The pediatric staff nurse respondents felt less competent in

the ability to assess the stages of labor, instruct patients on how to detect pacemaker failure and to predict the influence of physiological responses, such as shivering, on central venous pressure readings. The one exception was item number 15, "Measure central venous pressure" which can be classified as a physical-manual competency or skill. In reviewing the content in these items, it seems that a great deal of specialized knowledge was needed. Since most pediatric staff nurses are not involved, on a regular basis, in the care of women in labor, it is not surprising that they may not retain knowledge of the specific stages of labor. Also, since pacemakers are rarely implanted in children, pediatric staff nurses are seldom involved in the nursing care that is required for patients with pacemakers. Since predicting the influence of physiological responses, such as shivering, on central venous pressure readings is a highly specialized function unique to intensive care settings, and it is more closely related to formal, advanced physiology courses, it is not surprising that pediatric staff nurses perceived themselves as "needing supervision and instruction" in this area. A physical-manual skill, such as "Measure central venous pressure," is highly technical and commonly utilized in intensive care settings. Therefore, such skills, although directly related to the clinical setting, are skills that every pediatric nurse does not possess. It would seem that pediatric staff nurses, regardless of their sub-specialty, feel most competent in areas where they practice on a daily basis. Another example of this might be item number 25, "Notify the appropriate physician about significant changes in the

patient's condition." This item is a generic statement and, regardless of the clinical setting, each experienced pediatric nurse perceived herself as highly proficient within the setting in which she worked.

In the "safe, but practice needed" category, it is interesting that the 12 items evenly represent the three factors identified as components of clinical competency. According to Chickerling (1969), communicating therapeutically with emotionally disturbed patients, carrying out the role and responsibilities of a team leader, helping patients break down the management problems of chronic illness into workable units and helping families choose a mutually satisfying level of participation in caring for the dying patient would be defined as interpersonal competencies. Of course, the pediatric staff nurses who participated in this study are seldom expected to communicate therapeutically with emotionally disturbed patients. However, the ability to carry out the role and responsibilities of team leader, to help patients break down the management problems of chronic illness and to teach family members how to share responsibility in the care of a child who is terminally ill are very important aspects of the pediatric nurse's role. The respondents' perception that they need practice in these areas is appropriate because much experience is needed to attain proficiency in these areas. The physical-manual or technical skills in which the subjects perceived themselves to be "safe" included the ability to coach the patient in pain management techniques, to check arterio-venous shunts for patency and flow, to prepare and administer sliding scale insulin and to start intravenous fluids. These are all functions

that constitute a critical part of the pediatric staff nurse's role, and every effort should be made to assist pediatric staff nurses in developing their level of competency in these tasks. Finally, Chickerling would classify the detection of major dangerous cardiac arrhythmias on cardiac monitors, of signs and symptoms of acute pulmonary edema, and of signs and symptoms of digitalis toxicity as well as the teaching of stoma care to ileostomy patients as intellectual tasks. Once again, one of these tasks is highly specific to the intensive care setting. The detection of major dangerous cardiac arrhythmias is limited to pediatric areas in which patients are being monitored, i.e. the intensive care area. Therefore, it can be expected that most pediatric staff nurses would perceive their activities as "safe, but practice needed." On the other hand, detection of the signs and symptoms of acute pulmonary edema and of digitalis toxicity as well as the teaching of stoma care to ileostomy patients are critical aspects of the pediatric staff nurse role. Therefore, every effort should be made to assist nurses in developing their level of competency with respect to these functions.

In conclusion, the pediatric staff nurses who participated in this study perceived themselves as competent in tasks appropriate to their professional role. They tended to report a sense of competency in technical or physical-manual skills to a greater degree than in the interpersonal and intellectual tasks. This finding must be considered carefully because others (Pidgeon and Sander, 1982) have reported that interpersonal skills such as psychosocial care of the pediatric

patient are of primary importance.

Research Question 2: What is the feasibility of using the BPS in a pediatric setting?

Since all but one of the subjects responded to the tool in its entirety, it may be concluded that the tool was an appropriate one to utilize in the pediatric setting. It seemed that the pediatric nurses understood the items and were comfortable with the five levels of responses provided.

When reviewing those items to which most pediatric staff nurses responded with a perception of less competency it may be noted that these items are, for the most part, specific to intensive care settings and could possibly be deleted from the tool when administering it to a general pediatric staff nurse population. The ability to "measure central venous pressure," "instruct patient on how to detect pacemaker failure," "check arteriovenous shunts for patency and flow" and "predict the influence of physiological responses, such as shivering, on central venous pressure readings" are also infrequently performed in a general pediatric setting. Thus, the lower competency ratings were probably due to the highly specific nature of the content. Item number 14, "Assess the stages of labor during the childbirth proces" is one that is not usually utilized in the pediatric setting. Therefore, the low response from the pediatric staff nurses can be understood.

Since no questions were asked by the subjects during the time the data were collected, it can be concluded that the instrument was

clearly written and the additional instructions provided by this researcher were adequate. Therefore, it would be feasible to use this tool in order to obtain self-perceptions of competency from pediatric staff nurses. Indeed, this instrument, with slight modifications, constitutes a valuable means of assessing pediatric staff nurses' needs for professional knowledge as well as providing a needed mode for evaluating the performance of pediatric staff nurses in physical-manual, intellectual and interpersonal skills.

In conclusion, in hospitals where pediatric sub-specialty units exist, this tool could be varied slightly for pediatric staff nurses in each sub-specialty, i.e., Pediatric and Neonatal Intensive Care, and Medical as well as Surgical Pediatric Nursing because the role and functions of the pediatric staff nurse varies slightly within each of the sub-specialties. For example, although item number 15, to "measure central venous pressure" may be deleted when obtaining data from the Medical and Surgical pediatric staff nurses, it might be included in obtaining responses from Intensive Care pediatric staff nurses.

Research Question 3: Do differences exist between the new graduate's self-perceptions of clinical competency in Pediatric Nursing and the experienced nurse's self-perceptions of clinical competency in Pediatric Nursing as revealed in the subject's responses to the BPS?

In discussing this final research question, the data obtained from the subjects in each of the two sub-groups i.e. (1) the new graduates, $n = 15$ and (2) the experienced nurses, $n = 20$, were compared. Differences and similarities in responses to each item between the two

sub-groups were noted. Differences were studied in two realms, (1) the number of items in which at least 80% of the respondents from each sub-group chose Level 1, "high proficiency," and (2) items in which a great difference in percent of responses appeared at the low competency end of the continuum, Level 4, "supervision needed" and Level 5, "supervision and instruction needed." Similarities were also studied in two realms, (1) similarities of responses at Level 1, "high proficiency," and (2) similarities of responses at Level 5, "supervision and instruction needed."

The new graduate pediatric staff nurses felt "highly proficient" in only one of the 60 specified items. Item number one, "Turn and position a patient in bed" was the one nursing care function in which a large majority (80%) of the new graduates perceived themselves as having "high proficiency." This would imply that a new graduate in the specialty of Pediatric Nursing has a strong feeling of competency in a limited number of nursing functions. This finding is acceptable because, as a general rule, newly graduated nurses are not expected to be highly proficient in multiple nursing tasks. They are expected to be "safe" practitioners, working to develop a higher level of competency.

On the other hand, the experienced pediatric staff nurses perceived themselves as "highly proficient" in 13 items. Of these items, there was one outstanding item. The notification of the appropriate physician about the significant changes in the patient's condition was the one function in which all respondents (100%) perceived them-

selves to be functioning at Level 1, "high proficiency." This response would be expected of experienced nurses because it is an aspect of pediatric nursing that occurs daily. It is also an integral part of the professional pediatric staff nurse's role. The experienced pediatric staff nurse who did not know when to make a physician referral would not be considered a "safe" practitioner.

The experienced pediatric staff nurse respondents also perceived themselves as highly competent in giving gastric tube feedings, placing electrodes on patients for cardiac monitoring, using isolation techniques correctly, turning and positioning a patient in bed, observing for reactions and complications with blood transfusions, inserting naso-gastric tubes, preparing and giving oral medications to groups of patients, giving tracheostomy care, providing for the safety needs of patients having seizures, evaluating P.R.N. medications, assisting with a spinal tap and judging changes and trends in infant's hydration by palpation of fontanel. Since these tasks are manual skills it would seem appropriate to say that the experienced pediatric staff nurses perceived themselves as competent practitioners in technical areas. It is surprising that all of the tasks perceived by the experienced nurses as those in which they were "highly proficient," only one i.e., "notification of the appropriate physician about significant changes in patient's condition," could be considered an interpersonal skill. It might be expected that experienced nurses who work and deal with individuals on a daily basis would perceive themselves as more highly competent in interpersonal skills than is suggested by the data. Can

it be assumed that the formal and/or informal reward system in this hospital setting provides more positive feedback mechanisms for physical-manual activities than for intellectual or interpersonal skill?

When comparing the two sub-groups it was found that a greater percentage of the experienced pediatric staff nurses rated themselves as having "high proficiency" than did the new graduate nurses in 47 of 60 items in the BPS. It was expected that the experienced nurses would perceive themselves at a higher level of competency than the new graduates. Surprisingly, in 13 of 60 items, a greater percentage of the new graduates rated themselves as having "high proficiency" than did the experienced nurses. Those items in which more new graduates felt highly competent than the experienced nurses, were to ask for assistance in completing assignments when needed, ambulate post-operative patients for the first time after surgery, complete daily assignment within regular working hours, communicate therapeutically with emotionally disturbed patients, help patient break down the management problems of chronic illness into workable units, detect signs and symptoms of acute pulmonary edema and coach the patient in pain management techniques. It would not be surprising if these tasks were ones that could be categorized as intellectual functions because one would expect a recent graduate to perceive a high competency in intellectual skills or knowledge. These tasks however, seem to be either physical-manual skills or interpersonal skills. Could it be that the experienced nurses were more objective or realistic in their self-perceptions than were the new graduates?

The differences noted at the low competence end of the continuum were minimal. There were only six items in which the two sub-groups differed. Those items were to do a colostomy irrigation, do closed chest massage for a patient requiring resuscitation, measure central venous pressure, carry out the role and responsibilities of a team leader, check arteriovenous shunt for patency and flow and predict the influence of physiological responses, such as shivering, on central venous pressure readings. The new graduates reported feeling more competent in measuring central venous pressure, checking arteriovenous shunts for patency and flow and predicting the influence of physiological responses, such as shivering, on central venous pressure readings than the experienced pediatric staff nurses. Perhaps this can be attributed to the nature of the items. Although some can be categorized as physical-manual skills and are somewhat technical, each requires a sound theoretical basis. It may reflect the fact that new graduates who possess strong background knowledge in these areas, based on their recent educational experiences, have increased feelings of competency.

Similarities in the responses from both groups were noted at the two ends of the competency continuum, i.e., "high proficiency" and "supervision and instruction needed." Similarities were noted when there was a 5% or less difference in the responses of the two sub-groups. Similarities at Level 1, "high proficiency" appeared in 12 items (Table 4) such as ambulating patients, working with other health team members, etc. Similarities at Level 5, "supervision and instruction needed" appeared in eight items (Table 5). It would seem that these

similarities between new graduates and experienced pediatric staff nurses can be expected because the items reflect basic skills recently learned by new graduates and incorporated by experienced nurses as a result of repetition.

In conclusion, the new and experienced pediatric staff nurses perceived themselves as more highly competent in physical-manual skills and less highly competent in interpersonal skills. Differences and similarities exist between the two sub-groups that are consistent with their role and expertise.

Limitations

The lack of random selection and the small number of subjects who participated in this study limit the generalizability of the findings. However, it may be noted that this study is exploratory in nature and provides needed information upon which to develop further research.

Recommendations for Further Research

This study should be repeated, using a random selection procedure and a larger sample size. In order to accomplish this it would be well to include all pediatric staff nurses, regardless of their basic educational preparation. It would be beneficial to study pediatric nurses in additional hospital settings including those working in a pediatric unit of a community hospital. It is also recommended that in a future study, additional environmental controls be included, so that the participants could respond to the tool in the same setting.

In addition, it would be extremely valuable to continue to refine the Benner Proficiency Scale with two objectives in mind: (1) to develop alternate forms for use in varied pediatric settings and (2) to explore the feasibility of a quantitative component of the instrument. Finally, it would be interesting to explore the reward/punishment system in the hospital setting in terms of (1) who provides rewards (formally and/or informally) and (2) which nursing functions are rewarded.

Implications for Clinical Practice

The data obtained in this study may have importance in clinical settings. It seems that pediatric staff nurses tend to focus on competency in technical tasks as they begin to practice. Assistance, in the form of workshops and continuing education programs could be provided to assist them in attaining competence. However, since the experienced pediatric staff nurses did not perceive themselves as skilled in interpersonal and intellectual tasks, it would also seem important to provide appropriate continuing educational activities. In addition, some method of rewarding proficiency in cognitive and interpersonal functions could be devised.

Significance of the Study

The results of this study suggest that this instrument might be used by pediatric staff nurses to identify a need for self-development in any one of the three components of clinical competency i.e. (1) intellectual competency, (2) interpersonal competency, and (3)

physical-manual competency. Also, within the hospital setting, administrators could use the Benner Proficiency Scale to evaluate individual nurses' skills and therefore, more accurately respond to client needs. Staff development administrators could use the responses from nursing personnel to prepare individualized orientation programs which would focus on improving clinical skills, self-development abilities, and independent, competency-based learning activities. Finally, the data obtained as a result of this study may be used to generate additional research in the area of clinical competencies in pediatric nursing and nursing in general.

In conclusion, the data obtained in this study provides an initial necessary step in the weighty task of defining and measuring clinical competency in pediatric staff nurses. It may be expected that, as professional nurses develop additional measurement tools and use these in clinical settings to improve staff competency, the quality of nursing care rendered will be enhanced.

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APPENDIX A

BENNER PROFICIENCY SCALE
Part 1

INSTRUCTIONS

This section is a scale listing 60 nursing actions ranging from frequently performed, central skills, to infrequently performed, specialized skills. This survey asks you to indicate the level of performance you think (based on your experience) you should have, and the level of performance you think you actually do have. The scale contains two parts: IDEAL reflects how you think you should be functioning; REAL reflects how you think you actually are functioning. The scale is composed of five levels of performance:

- | | |
|--|---|
| 1. High Proficiency: | Able to perform competently and efficiently without supervision. |
| 2. Moderate Proficiency: | Able to perform without supervision with reasonable efficiency. |
| 3. Safe, but Practice Needed: | Able to perform without supervision but more practice is needed in order to perform efficiently. |
| 4. Supervision Needed: | Understands the theory and principles but would need supervision because of limited practice or experience. |
| 5. Supervision and Instruction Needed: | Was not introduced to the theory and principles and would need both instruction and supervision to perform the skill. |

For example, if the nursing skill is "Able to start intravenous fluids" and you think you should be able to "perform without supervision but more practice is needed in order to perform efficiently," you would mark IDEAL "Safe but Practice Needed," by filling in box #3, as shown in the example below. Then, if based on your experience, you think you actually are "able to perform competently and efficiently without supervision," you would mark REAL, "High Proficiency" by filling in box #1, as illustrated.

Able to start
intravenous fluids

IDEAL	1	2	→ 3	4	5
REAL	← 1	2	3	4	5

Both parts IDEAL and REAL should be marked for each nursing action. Please use the #2 pencil that is provided to mark your responses, and completely erase any response you wish to change.

THANK YOU AGAIN!!

BENNER PROFICIENCY SCALE

Part II

QUESTION AND ANSWER KEY

Please use this key to complete Part II of the scale. The following 11 questions correspond to items 1-11 on page 4 of your answer sheets. For example, the first question listed below, "How old are you?" corresponds to item 1, "Age", on page 4 of your answer sheets. The four responses for the first question - "under 23 years old", "24 to 29 years old", "30 to 39 years old", and "40 years old or older" - correspond to the four numbered boxes to the right of item 1. So if you are 28 years old, you would mark box 2 to the right of item 1 as illustrated.

1. Age	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Please use a #2 pencil to mark your responses, and mark only one response for each question. Please erase completely any response you wish to change.

1. How old are you?
 1. Under 23 years old
 2. 24 to 29 years old
 3. 30 to 39 years old
 4. 40 years or older

2. If you are a new graduate, what is the amount of nursing-related experience you had *before entering* your most recent nursing program? If you are *not* a new graduate, please go on to question #3.
 1. None
 2. Less than one year
 3. One to two years
 4. Three to four years
 5. Five years or more

3. What is your present employment status?
 1. Full-time employment
 2. Part-time employment
 3. Full-time student
 4. Armed Forces
 5. Unemployed and seeking work
 6. Unemployed but not seeking work

4. In what area do you work the most? If you are *not* employed in an *acute care hospital*, please go on to question #5.
 1. Adult medical or surgical
 2. Pediatrics
 3. OB-GYN
 4. ICU/CCU
 5. O.R./Recovery Room
 6. Emergency room
 7. Psychiatric unit
 8. Staffing registry
 9. Other

(Questions continued on other side)

5. If you were to describe your career direction during the next five years, which of the areas listed below would be your first choice?
- | | |
|--|---|
| 1. Clinical nursing role in the acute care hospital | 6. Nursing administration |
| 2. Clinical nursing role in an ambulatory care setting | 7. Academic administration |
| 3. Clinical specialist role | 8. Psychiatric or community mental health |
| 4. Nursing education | 9. Other nursing role |
| 5. Nurse practitioner | 10. Career outside nursing |
6. Please indicate the type of *nursing* program you completed.
1. L.V.N./L.P.N.
 2. Hospital diploma program
 3. Associate degree program
 4. Baccalaureate degree program
7. Please indicate the highest degree you have obtained.
- | | |
|------------------------------|-------------------------------|
| 1. Hospital diploma R.N. | 5. Doctor of Nursing Science |
| 2. Associate degree R.N. | 6. Non-nursing B.A. or B.S. |
| 3. Baccalaureate degree R.N. | 7. Non-nursing M.A. or M.S. |
| 4. R.N., Masters degree | 8. Non-nursing Ph.D. or Ed.D. |
8. If you are a nurse educator, which response *best represents your teaching role with undergraduate students?* If you are *not* a nurse educator, please go on to question 9.
1. Primarily clinical instruction
 2. Primarily classroom instruction
 3. Approximately equal amounts of clinical and classroom instruction
9. Please indicate how long it has been since you have had a position where the major amount of your time was spent giving direct patient care.
1. Presently involved
 2. 0-2 years
 3. 3-5 years
 4. More than 5 years

THE LAST TWO QUESTIONS PERTAIN ONLY TO THOSE IN NURSING SERVICE POSITIONS.

10. In your present position, approximately how many new nursing graduates do you work with during a year?
- | | |
|-----------|--------------|
| 1. None | 4. 5 to 6 |
| 2. 1 to 2 | 5. 7 or more |
| 3. 3 to 4 | |
11. Please choose the *one* description which *best identifies your current position.*
- | | |
|--|------------------------|
| 1. Staff nurse, shift charge nurse or team leader | 3. Head nurse |
| 2. Director or associate/assistant director of nursing | 4. In-service educator |
| | 5. Clinical specialist |
| | 6. Supervisor |

BENNER PROFICIENCY SCALE

PART I: PERFORMANCE EXPECTATIONS

- 1=High Proficiency
- 2=Moderate Proficiency
- 3=Safe but Practice Needed
- 4=Supervision Needed
- 5=Supervision & Instruction Needed

FOR OFFICE USE ONLY										
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5

- USE #2 PENCIL
- ERASE COMPLETELY TO CHANGE
- EXAMPLE:

PLEASE SEE THE ENCLOSED YELLOW SHEET FOR DEFINITIONS OF THE ABOVE TERMS AND INSTRUCTIONS FOR MARKING THE FOLLOWING SCALE.

IDEAL	1	2	3	4	5
REAL	1	2	3	4	5

1. Turn and position a patient in bed	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
2. Ensure patient's rights to continuity of nursing care when patient is transferred	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
3. Ask for assistance in completing assignment when needed	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
4. Ambulate post-operative patients for the first time after surgery	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
5. Do colostomy irrigation	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
6. Respect the patient's rights to privacy when discussing patient's condition with colleagues	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
7. Contribute to productive working relationships with other health team members	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
8. Prepare and give oral meds to groups of patients	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
9. Write patient care standards for patients with similar problems	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
10. Do closed chest massage for patient requiring resuscitation	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
11. Do urinary catheterization	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
12. Use therapeutic communication skills to identify and reduce anxiety in the patient and/or family	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
13. Complete daily assignment within regular working hours (excluding emergencies or staff shortages)	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
14. Assess the stages of labor during the childbirth process	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
15. Measure central venous pressure	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5

1=High Proficiency
2=Moderate Proficiency

3=Safe but Practice Needed
4=Supervision Needed

5=Supervision & Instruction Needed

13. Communicate therapeutically with emotionally disturbed patients.	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
17. Carry out role and responsibilities of team leader	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
16. Convert medication dosages and units appropriately for children	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
19. Assess the resources, constraints and demands of the patient's social support system	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
20. Give an inter-shift report with all pertinent information	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
21. Observe for reactions and complications with blood infusions	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
22. Give tracheostomy care, including dressing change	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
23. Insert naso-gastric tube	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
24. Help patient break down the management problems of chronic illness into workable units	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
25. Notify appropriate physician about significant changes in patient's condition	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
26. Recognize early trends in vital signs associated with impending shock	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
27. Assume responsibility for the level of care provided by team members	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
28. Instruct patient on how to detect pacemaker failure	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
29. Give gastric tube feedings	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
30. Help families choose a mutually satisfying level of participation in caring for the dying patient	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
31. Teach the patient routine measures to prevent post-operative complications	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
32. Detect major dangerous cardiac arrhythmias on cardiac monitors	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
33. Help patients sort and understand health information so they can make informed choices about therapy	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
34. Participate effectively in a multidisciplinary team conference	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
35. Place electrodes on patients for cardiac monitoring	IDEAL REAL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5

1=High Proficiency
2=Moderate Proficiency

3=Safe but Practice Needed
4=Supervision Needed

5=Supervision & Instruction Needed

36. Ensure that the dying patient is not abandoned	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
37. Identify need for community and home health referrals and initiate discharge planning	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
38. Detect signs and symptoms of acute pulmonary edema	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
39. Coach the patient in pain management techniques	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
40. Provide for the safety needs of patients having seizures	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
41. Use isolation techniques correctly e.g., hand washing, gowning, and gloving	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
42. Help patients take responsibility for their own health	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
43. Teach stoma care to ileostomy patients	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
44. Take nursing histories that guide the provision of individualized patient care	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
45. Participate in identification of unsafe patient care practices and assume responsibility for intervention	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
46. Write nursing care plans for individual patients	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
47. Check arteriovenous shunts for patency and flow	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
48. Interact purposefully with other team members to keep them informed of changes in the patient's condition	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
49. Prepare and administer sliding scale insulin	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
50. Detect signs and symptoms of digitalis toxicity	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
51. Administer and monitor oral-nasal oxygen therapy	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
52. Evaluate P.R.N. medications so patients are not undermedicated or overmedicated	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
53. Assist with a spinal tap	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
54. Predict the influence of physiological responses, such as shivering, on Central Venous Pressure readings	IDEAL REAL	1 1	2 2	3 3	4 4	5 5
55. Start intravenous fluids	IDEAL REAL	1 1	2 2	3 3	4 4	5 5

1=High Proficiency
2=Moderate Proficiency

3=Safe but Practice Needed
4=Supervision Needed

5=Supervision & Instruction Needed

56. Conduct physical exam of the chest	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
57. Evaluate signs of increased intracranial pressure	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
58. Monitor the fluid and electrolyte balance of patients receiving hyperalimentation therapy	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
59. Observe for and prevent circulatory problems for patients with orthopedic casts	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5
60. Judge changes and trends in infant's hydration by palpation of fontanel	IDEAL	1	2	3	4	5
	REAL	1	2	3	4	5

PART II. PLEASE SEE THE ENCLOSED WHITE INSTRUCTION SHEET FOR COMPLETE QUESTIONS AND RESPONSES FOR THE FOLLOWING SECTION

1. Age	1	2	3	4						
2. Nursing-related experience prior to your most recent nursing program (new graduates only)	1	2	3	4	5					
3. Employment status	1	2	3	4	5	6				
4. Area of employment	1	2	3	4	5	6	7	8	9	
5. Career choice	1	2	3	4	5	6	7	8	9	10
6. Nursing program you completed initially	1	2	3	4						
7. Highest degree obtained	1	2	3	4	5	6	7	8		
8. Teaching role (educators only)	1	2	3							
9. Involvement in direct patient care.	1	2	3	4						

THE LAST TWO QUESTIONS PERTAIN TO NURSING SERVICE PERSONS ONLY.

10. Number of new graduates you work with	1	2	3	4	5	
11. Current position	1	2	3	4	5	6

APPENDIX B

LETTER TO HOSPITAL NURSING ADMINISTRATOR

Dear _____,

I would like the opportunity to discuss my research proposal with you. I am interested in involving the nursing staff, both new and experienced, of this institution in my study. The study involves the staff nurses' self-assessment of clinical competency.

The need to assess clinical competency in pediatric staff nurses has numerous implications, mainly in the area of staff evaluation and individual professional assessment. On-going development provided through the institution and/or self-development by professional nurses will tend to improve clinical intervention and enhance the quality of nursing care provided to patients.

I assure you that the data will remain anonymous. At the completion of the study, I will be very happy to share my findings with you and with the staff, if it seems desirable.

Thank you for your time and consideration. I am hoping to meet with you, at your convenience, as soon as possible, and am looking forward to your reply.

Sincerely,

Roseann Zahara-Such, R.N.

APPENDIX C

LETTER TO SUBJECTS

Dear _____,

You have been randomly selected from the nursing staff at Children's Memorial Hospital to participate in this study. This study, entitled "An Observational Study of the Self-Perceptions of Clinical Competency in New Graduate and Experienced Pediatric Staff Nurses" is my thesis. I would have liked to personally ask you to participate but Loyola University requires that your choice to participate be made freely. The school's review board felt that it would be better for the participants to remain anonymous to me. Therefore, I must ask you to participate through this letter. If you do not wish to participate, please return the entire packet to me. Thank you for your time. If you do wish to participate, please read on.

I am trying to identify the clinical competencies of pediatric staff nurses. It involves a questionnaire which asks for your self-perceptions of your clinical competency in 60 separate nursing functions. The entire process will probably take 10-15 minutes of your time. Please read the attached General Information and Instruction sheets for more details.

Thank you very much, you are helping me a great deal! If possible, could you return the completed questionnaire to me by February 24, 1984? Thank you again, and do not hesitate to call if you have any questions.

Sincerely,

Roseann Zahara-Such

APPENDIX D

GENERAL INFORMATION

Thank you very much for your participation in this study. Please remember that your participation is totally voluntary and you may withdraw at any time. Your responses will be kept in complete confidence and indicate your consent to participate in this study. Please do not include any identifying marks on the tool so that anonymity may be maintained.

The Benner Proficiency Scale was written within the context of general nursing practice. Therefore, the items are not specific to pediatric nursing. It is vital that you respond to the items within the context of pediatric nursing. In other words, each item should be thought of in reference to the pediatric patient (child) or his family. Item number 14 in Part I is the only one that is not applicable to pediatric nursing. Please omit item number 2 in Part II unless you have previous experience as a Pediatric Nursing Assistant. All responses should be marked in the space provided alongside "Real". In the spaces marked "Ideal" please indicate how someone with your experience should function.

Feel free to ask questions after you have completed the questionnaire. I will be happy to share my findings with you. I may be reached at 880-4612 before 4:00 p.m. Thank you again.

APPENDIX E

BPS SCORES

Percentage of Responses in Each Category in Sub-Groups

New n = 15
Experienced n = 20

Percentage of Responses in Each Category in Total Group

N = 35

High Proficiency
Moderate Proficiency
Safe, but Practice Needed
Supervision Needed
Supervision and Instruction Needed

High Proficiency
Moderate Proficiency
Safe, but Practice Needed
Supervision Needed
Supervision and Instruction Needed

1. Turn and position a patient in bed.											
	1	2	3	4	5		1	2	3	4	5
NEW	80%	20%					83%	14%	3%		
EXP.	85%	10%	5%								
2. Ensure patient's rights to continuity of nursing care when patient is transferred.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	46%	13%	13%			43%	37%	14%	6%	
EXP.	55%	30%	15%								
3. Ask for assistance in completing assignment when needed.											
	1	2	3	4	5		1	2	3	4	5
NEW	53%	40%	7%				49%	49%	2%		
EXP.	45%	55%									
4. Ambulate post-operative patients for the first time after surgery.											
	1	2	3	4	5		1	2	3	4	5
NEW	53%	27%	14%	6%			51%	34%	9%	6%	
EXP.	50%	40%	5%	5%							
5. Do colostomy irrigation.											
	1	2	3	4	5		1	2	3	4	5
NEW	14%	14%	20%	46%	6%		31%	11%	28%	23%	6%
EXP.	45%	10%	35%	5%	5%						

6. Respect the patient's rights to privacy when discussing patient's condition with colleagues.											
	1	2	3	4	5		1	2	3	4	5
NEW	60%	33%		7%			66%	26%	6%	3%	
EXP.	70%	20%	10%								
7. Contribute to productive working relationships with other health team members.											
	1	2	3	4	5		1	2	3	4	5
NEW	40%	33%	26%				43%	43%	14%		
EXP.	45%	50%	5%								
8. Prepare and give oral meds to groups of patients.											
	1	2	3	4	5		1	2	3	4	5
NEW	53%	40%	7%				69%	26%	6%		
EXP.	80%	15%	5%								
9. Write patient care standards for patients with similar problems.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	40%	46%	7%			23%	40%	31%	6%	
EXP.	35%	40%	20%	5%							
10. Do closed chest massage for patient requiring resuscitation.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	40%	7%	26%	7%		31%	28%	23%	14%	3%
EXP.	40%	20%	35%	5%							
11. Do urinary catheterization.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	46%	26%				49%	34%	17%		
EXP.	65%	25%	10%								
12. Use therapeutic communication skills to identify and reduce anxiety in the patient and/or family.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	60%	20%				26%	60%	14%		
EXP.	30%	60%	10%								
13. Complete daily assignment within regular working hours (excluding emergency or staff shortages).											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	40%	14%				43%	49%	9%		
EXP.	40%	55%	5%								

14. Assess the stages of labor during the childbirth process.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	7%	20%	53%	13%		3%	11%	17%	51%	17%
EXP.		15%	15%	50%	20%						
15. Measure central venous pressure.											
	1	2	3	4	5		1	2	3	4	5
NEW	13%		13%	53%	20%		9%		9%	37%	46%
EXP.	5%		5%	25%	65%						
16. Communicate therapeutically with emotionally disturbed patients.											
	1	2	3	4	5		1	2	3	4	5
NEW	13%	7%	80%				11%	17%	57%	11%	3%
EXP.	10%	25%	40%	20%	5%						
17. Carry out role and responsibilities of team leader.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	13%	26%	46%	7%		3%	34%	11%	20%	3%
EXP.	50%	50%									
18. Convert medication dosages and units appropriately for children.											
	1	2	3	4	5		1	2	3	4	5
NEW	40%	40%	20%				49%	34%	11%	3%	3%
EXP.	55%	30%	5%	5%	5%						
19. Assess the resources, constraints and demands of the patient's social support system.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	46%	46%				20%	51%	23%	6%	
EXP.	30%	55%	5%	10%							
20. Give an inter-shift report with all pertinent information.											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	33%	20%				63%	28%	9%		
EXP.	75%	25%									
21. Observe for reactions and complications with blood transfusions.											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	26%	26%				69%	20%	11%		
EXP.	85%	15%									

22. Give tracheostomy care, including dressing change.											
	1	2	3	4	5		1	2	3	4	5
NEW	33%	26%	20%	13%	7%		60%	17%	14%	6%	3%
EXP.	80%	10%	10%								
23. Insert naso-gastric tube.											
	1	2	3	4	5		1	2	3	4	5
NEW	60%	7%	20%	13%			74%	11%	9%	6%	
EXP.	85%	15%									
24. Help patient break down the management problems of chronic illness into workable units.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	26%	53%	13%			6%	40%	43%	11%	
EXP.	5%	50%	35%	10%							
25. Notify appropriate physician about significant changes in patient's condition.											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	33%	20%				77%	14%	9%		
EXP.	100%										
26. Recognize early trends in vital signs associated with impending shock.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	40%	33%				43%	40%	17%		
EXP.	55%	40%	5%								
27. Assume responsibility for the level of care provided by team members.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	46%	26%	7%			37%	43%	17%	37%	
EXP.											
28. Instruct patient on how to detect pacemaker failure.											
	1	2	3	4	5		1	2	3	4	5
NEW			20%	53%	26%			9%	17%	51%	23%
EXP.		15%	15%	50%	20%						
29. Give gastric tube feedings.											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	20%	26%	7%			74%	11%	11%	3%	
EXP.	95%	5%									

30. Help families choose a mutually satisfying level of participation in caring for the dying patient.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	26%	46%	13%	7%		11%	31%	37%	14%	6%
EXP.											
31. Teach the patient routine measures to prevent post-operative complications.											
	1	2	3	4	5		1	2	3	4	5
NEW	33%	40%	26%				49%	31%	11%	9%	
EXP.	60%	25%	15%								
32. Detect major dangerous cardiac arrhythmias on cardiac monitors.											
	1	2	3	4	5		1	2	3	4	5
NEW	13%	26%	26%	26%	7%		6%	17%	37%	28%	11%
EXP.		10%	45%	30%	15%						
33. Help patients sort and understand health information so they can make informed choices about therapy.											
	1	2	3	4	5		1	2	3	4	5
NEW	13%	26%	53%	7%			20%	37%	37%	6%	
EXP.	25%	45%	25%	5%							
34. Participate effectively in a multidisciplinary team conference.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	26%	40%	13%			28%	34%	31%	6%	
EXP.	35%	40%	25%								
35. Place electrodes on patients for cardiac monitoring.											
	1	2	3	4	5		1	2	3	4	5
NEW	60%	13%	20%	7%			80%	6%	9%	6%	
EXP.	95%			5%							
36. Ensure that the dying patient is not abandoned.											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	20%	26%	7%			46%	23%	26%	6%	
EXP.	45%	25%	25%	5%							
37. Identify need for community and home health referrals and initiate discharge planning.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	40%	40%	13%			28%	43%	23%	6%	
EXP.	45%	45%	10%								

38. Detect signs and symptoms of acute pulmonary edema.											
	1	2	3	4	5		1	2	3	4	5
NEW	33%	13%	26%	26%			26%	23%	26%	26%	
EXP.	20%	30%	25%	25%							
39. Coach the patient in pain management techniques.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	26%	40%	13%			14%	28%	34%	20%	3%
EXP.	10%	30%	30%	25%	5%						
40. Provide for the safety needs of patients having seizures.											
	1	2	3	4	5		1	2	3	4	5
NEW	53%	26%	20%				69%	20%	11%		
EXP.	80%	15%	5%								
41. Use isolation techniques correctly e. g., hand washing, gowning and gloving.											
	1	2	3	4	5		1	2	3	4	5
NEW	73%	20%	7%				83%	11%	3%	3%	
EXP.	90%	5%		5%							
42. Help patients take responsibility for their own health.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	46%	33%				26%	49%	20%	3%	3%
EXP.	30%	50%	10%	5%	5%						
43. Teach stoma care to ileostomy patients.											
	1	2	3	4	5		1	2	3	4	5
NEW		20%	40%	20%	20%		14%	26%	37%	11%	11%
EXP.	25%	30%	35%	5%	5%						
44. Take nursing histories that guide the provision of individualized patient care.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	46%	33%				23%	60%	17%		
EXP.	25%	70%	5%								
45. Participate in identification of unsafe patient care practices and assume responsibility for intervention.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	33%	33%	7%			43%	34%	20%	3%	
EXP.	55%	35%	10%								

46. Write nursing care plans for individual patients.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	46%	26%				43%	37%	20%		
EXP.	55%	30%	15%								
47. Check arteriovenous shunts for patency and flow.											
	1	2	3	4	5		1	2	3	4	5
NEW		20%	46%	7%	26%		39%	9%	40%	23%	26%
EXP.	5%		35%	35%	25%						
48. Interact purposefully with other team members to keep them informed of changes in the patient's condition.											
	1	2	3	4	5		1	2	3	4	5
NEW	53%	33%	13%				63%	31%	6%		
EXP.	70%	30%									
49. Prepare and administer sliding scale insulin.											
	1	2	3	4	5		1	2	3	4	5
NEW	13%	26%	33%	13%	13%		14%	26%	23%	23%	14%
EXP.	15%	25%	15%	30%	15%						
50. Detect signs and symptoms of digitalis toxicity.											
	1	2	3	4	5		1	2	3	4	5
NEW	7%	26%	46%	20%			14%	28%	34%	23%	
EXP.	20%	30%	25%	25%							
51. Administer and monitor oral-nasal oxygen therapy.											
	1	2	3	4	5		1	2	3	4	5
NEW	33%	33%	33%				54%	26%	20%		
EXP.	70%	20%	10%								
52. Evaluate P. R. N. medications so patients are not under medicated or overmedicated.											
	1	2	3	4	5		1	2	3	4	5
NEW	60%	20%	20%				71%	20%	9%		
EXP.	80%	20%									
53. Assist with spinal tap.											
	1	2	3	4	5		1	2	3	4	5
NEW	40%	7%	40%		13%		63%	11%	20%	6%	
EXP.	80%	15%	5%								

54. Predict the influence of physiological responses, such as shivering, on Central Venous Pressure readings.											
	1	2	3	4	5		1	2	3	4	5
NEW	13%	7%	13%	33%	33%		6%	6%	11%	28%	49%
EXP.		5%	10%	25%	60%						
55. Start intravenous fluids.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	13%	26%	20%	13%		26%	14%	23%	20%	17%
EXP.	25%	15%	20%	20%	20%						
56. Conduct physical exam of the chest.											
	1	2	3	4	5		1	2	3	4	5
NEW	20%	40%	33%	7%			28%	28%	31%	11%	
EXP.	35%	20%	30%	15%							
57. Evaluate signs of increased intracranial pressure.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	40%	33%				43%	31%	23%	3%	
EXP.	55%	25%	15%	5%							
58. Monitor the fluid and electrolyte balance of patients receiving hyperalimentation therapy.											
	1	2	3	4	5		1	2	3	4	5
NEW	26%	26%	26%	13%	7%		46%	20%	23%	9%	3%
EXP.	60%	15%	20%	5%							
59. Observe for and prevent circulatory problems for patients with orthopedic casts.											
	1	2	3	4	5		1	2	3	4	5
NEW	46%	13%	33%				46%	26%	26%	3%	
EXP.	45%	35%	20%								
60. Judge changes and trends in infant's hydration by palpation of fontanel.											
	1	2	3	4	5		1	2	3	4	5
NEW	60%	20%	13%	7%			71%	17%	9%	3%	
EXP.	80%	15%	5%								

APPROVAL SHEET

The thesis submitted by Roseann M. Zahara-Such has been read and approved by the following committee:

Dr. Elizabeth B. Brophy, Director
Associate Professor, Nursing, Loyola

Dr. Dona J. Snyder
Associate Professor, Nursing, Loyola

Beverly Kopala
Assistant Professor, Nursing, Loyola

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 with 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.

4-18-84
Date

Elizabeth B. Brophy Ph.D.
Director's Signature