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Effects of Nurse Extern Programs on Student Nurse Performance

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EFFECT OF NURSE EXTERN PROGRAMS
ON STUDENT NURSE PERFORMANCE

By
Lola A. Coke

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ABSTRACT

EFFECTS OF NURSE EXTERN PROGRAMS
ON STUDENT NURSE PERFORMANCE

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Lola A. Coke

This study was done to determine if summer nurse extern programs increased the nursing performance of student nurses. The conceptual framework for the study was developed from Benner's (1984) "From Novice to Expert". Forty five students from six hospital based nurse extern programs in Southwestern Michigan participated in the study. A pretest-posttest design was used. Schwirian's (1978) Six Dimension Scale of Nursing Performance was used to measure six nursing performance sub scales: leadership, critical care, professional development, teaching/collaboration, planning/evaluation, and interpersonal relations/communication. Frequency and quality scores were obtained for each behavior. It was hypothesized that an increase in both frequency and quality scores would be attained in the sub scales as well as in total mean scores upon completion of the summer extern experience. Probability was set at $p < .01$. The paired t-test was used to measure statistical significance of the mean scores between pretest and posttest. Statistical significance was obtained in total mean scores in both frequency and quality. Statistical significance was obtained in both frequency and quality scores in the critical care sub scale. Statistical significance was obtained in quality scores in all the remaining sub scales. Results support increased skill acquisition and confidence levels as a result of the summer extern experience.
Dedication

To my loving family
Edward, my husband
Sara, my daughter
Thomas, my son
For the sacrifices you made and the support you gave.
Thank you.

A knowledge not gained by words but by touch, sight, sound, victories, failures, sleeplessness, devotions, love—the human experiences and emotions of this earth and of oneself and other men.

--Adlai Stevenson
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CHAPTER I
INTRODUCTION

Nursing is an increasingly complex profession as technology advances, the knowledge base increases and patients in acute care settings present nurses with multiple health problems (Benner & Benner, 1979; Oermann & Navin, 1991; Schempp & Rompre, 1986; Shamian & Inhaber, 1985). At the same time, health care costs are escalating and government controls dictate shorter hospital stays (Benner & Benner, 1979; Shamian & Inhaber, 1985). This results in many budget constraints for acute care settings. These constraints reduce monies available for nursing education and are a primary reason why orientation periods for graduate nurses are becoming shorter in length (Benner & Benner, 1979; Shamian & Inhaber, 1985).

It is nearly impossible, however, for new nurses to develop entry level practice skills, become acclimated to an acute care setting and socialize into the work group during the shortened four to six week orientation period (Suess, Schweitzer & Williams, 1982). This leaves many new graduate nurses feeling overloaded with information, frustrated and lacking in clinical experience to practice independently once the orientation period is over.
The educational process for nursing has also changed. Schools of nursing have evolved from being hospital based and skill focused to collegiate environments with a theoretical focus (Limon, Spencer & Waters, 1981; Suess, Schweitzer & Williams, 1982; Vanetzian & Higgins, 1990). The literature indicates that while most graduates have an adequate theoretical base they lack competence in the clinical practice setting (Clayton, Broome & Ellis, 1989; Scheetz, 1989). This lack of competence is manifested by their difficulty in applying theory to practice, problem solving and awkwardness when performing psychomotor skills.

New graduate nurses leave colleges and universities well versed in theory, but not practiced in skills valued by nursing service. They have difficulty coping with the day to day realities of the work world (Limon, Spencer & Waters, 1981). As a result, graduates of college based nursing programs are often perceived (and perceive themselves) as being unprepared for the "real world" of nursing (Schempp & Rompre, 1986). Their basic perception of what the nursing role is has been portrayed through faculty and their socialization to nursing in the academic setting. This is incongruent with the role of the staff nurse in actual practice. New graduates feel personally responsible for their lack of preparation for the staff nurse role. This results in increased role stress, anxiety and pressure for the new graduate. Many new graduates perceive their transition from school to work as a crisis (Schempp &
Rompre, 1986). The new graduate develops role conflict because of differences between the professional role taught in nursing school and the bureaucratic role in acute care agencies.

Marlene Kramer (1979, 1984) has done extensive research that indicates that professional/bureaucratic role conflict is a major factor in the job dissatisfaction of nurses.

The major tenets of Kramer's Framework are these:

1. The professional orientation provided by college based schools of nursing causes conflict when new nurses begin their practice in bureaucratic work settings.

2. The socialization prevailing in most baccalaureate schools of nursing, with their heavy emphasis on professionalism is quite different in content and process from the socialization encountered in most work settings. The concepts are taught with little or no emphasis on the compromises or shortcuts required in the work world.

3. The workplace focus is on how values are put to work in the context of less than ideal situations, such as staff shortages and emergencies.

Patricia Benner (1984) has also done work on the socialization of new graduates to the work world. "Ideas about how to implement educationally established values clash with work world values. Values provide the substructure or background that make it possible to focus on problems and goals. When people are able to implement their values smoothly, adjustments are made with little or no
conflict and the values remain intact. Values come to the forefront of one's awareness only when implementing them becomes frustrating because of one's lack of skill, because of constraints in the environment or for such reasons as lack of a shared understanding with one's coworker" (p. 193).

Since the writing of Kramer and Benner there have been improvements in both teaching methods and in transition programs to reduce role conflict. New graduates continue, however, to need assistance in resolving this role conflict. They need help in developing ways of achieving competence in the work world while retaining professional values learned in nursing school. Both nursing service and education need to work together to ease the transition from the student role to the nursing practice role (Benner & Benner, 1979; Lewison & Gibbons, 1980; Limon, Spencer & Waters, 1981; Oermann & Navin, 1991; Shamian & Inhaber, 1985).

Expertise takes time to develop and it is neither cost effective nor practical to try to "teach" it in formal education programs (Benner, 1984). It is not necessary for instructors of the novice to be able to perform clinically at the advanced levels. They need to be expert, however, at making visible the explicit guidelines and principles that will get the novice into the clinical situation in a safe and efficient way. As the students advance in clinical specialization, they need teachers who can themselves demonstrate advanced levels of clinical judgment. Expert clinicians in the clinical setting can augment clinical
instruction by pointing out patient problems that are unusual and by illustrating what is normally expected. This kind of clinical comparison process, based upon clinical situations at hand, requires joint effort between the preceptor on the patient care unit and the nurse educator.

One approach to assist students in making successful role transition is to provide opportunities in which the student can practice quality nursing care within the confines of the work environment. Transition programs have been developed to provide this opportunity (Bizek & Oermann, 1990; Clayton, Broome & Ellis, 1989; Fire, Bozett & Dearner, 1984; Olson, Gresley & Heater, 1984; Scheetz, 1989; Shamian & Inhaber, 1985).

Transition programs are defined as any structural program designed to ease school to work transition in nursing and reduce the conflict felt by the new graduate entering the professional role of the nurse for the first time (Shamian & Inhaber, 1985). Programs identified in the literature include:

1. Nurse internships: Programs in which a student nurse or new graduate rotates into several clinical areas to obtain a variety of clinical experiences. They may or may not include the use of preceptors (Schempp & Rompre, 1986).

2. Preceptorships: Programs that consistently utilize the one-to-one guidance of another nurse who assists and guides the student or new graduate in the clinical setting
3. Externships: Programs that employ student nurses during the summer months and/or weekends during the school year. Students work under the supervision of an experienced nurse (Fire, Bozett & Dearner, 1984; Olson, Gresley & Heater, 1984).

In any of these transition programs, students/graduates function in a health care setting outside their educational institution under the supervision of nurses. This direct, on-site supervision has many advantages. First, the student develops clinical and professional competence in the delivery of nursing care. Second, they become familiar with the cultural, economic, political and environmental determinants of health. Third, they learn the administrative and organizational structure of the health care facility (Shamian and Inhaber, 1985).

Preceptorship experiences provide an opportunity to learn to deal constructively with professional and bureaucratic role conflict. The student forms an intense relationship with the precepting nurse who is a practicing staff nurse, and is exposed to the nursing role through dialogue, observation and role modeling. The student is involved in daily decision making processes, protocols and management of patient care. By working with a practitioner functioning in the role, students are able to model behaviors and become socialized into the professional
nursing role thus reducing role stress (Reilly & Oermann, 1985).

Nursing student preceptorship programs can be developed jointly between a school of nursing and a health care institution or solely by the health care institution. Most of the literature describing the effects of these programs is descriptive and discusses how preceptors are selected, their role and how they are evaluated (Lewison & Gibbons, 1980; Scheetz, 1989; Shamian & Inhaber, 1985). Very little research has been published describing how these preceptor experiences affect nursing performance and the transition from school to nursing practice.

It is the belief of the author that summer extern programs increase skill acquisition and nursing performance, enhance professional development and move the student toward basic competence in nursing practice. Personal experience coordinating a nurse extern program has offered the opportunity to observe student behavior. By the end of the summer it was apparent that the students had grown in psychomotor skill and organizational ability. Students verbalized how the program was valuable and evaluated the program in the same manner. There are some studies which empirically validate this observation, but replication is needed.
Purpose

This study examined summer nurse extern programs who employed student nurses from ADN, Diploma and Baccalaureate schools of nursing. The purpose of the research was to determine if students in summer nurse extern programs exhibited increased nursing performance at the completion of the externship.

Research Question

Do student nurses who participate in summer nurse extern programs demonstrate significant increased nursing performance by the completion of the externship?
Chapter II
LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Literature Review

Research has been conducted to evaluate the various types of transition programs that have been developed (Bizek & Oermann, 1990; Clayton, Broome & Ellis, 1989; Dobbs, 1984; Fire, Bozett & Dearner, 1984; Itano, Warren & Ishida, 1987; Jairath, Costello, Wallace & Rudy, 1985; Oermann & Navin, 1991; Peirce, 1991; Scheetz, 1989; Vanetzian & Higgins, 1990). They all are different in their methodology and/or measurement. There were a variety of outcomes reported for these programs and common themes were evident. These included: 1) decreased turnover rates, 2) increased retention rates, 3) increased self-confidence of the student/new graduate, 4) increased job satisfaction, and 5) improved performance and clinical competence. Although the various programs are distinct from one another in terms of content, setting, duration and stage of the nurse's socialization at which they occur, all are described as programs designed to ease the transition from student to staff nurse role (Lewison & Gibbons, 1980).

A review of pertinent research involving these studies about transition programs is described. Studies to determine effectiveness of transition programs as well as related articles about transition programs are included.
Studies of Transition Programs

Jairath, Costello, Wallace, & Rudy (1985) did a repeated measures, control group, quasi-experimental study which determined the effect of a seventeen week pre-graduate preceptorship program on diploma nursing student performance. A comparison was done between students, some of whom were in a preceptorship (N=9) and some of who were not (N=13). The Schwirian Six-Dimension (Six-D) Scale of Nursing Performance was used to measure performance prior to, during (at 4 weeks), and upon completion of the pre-graduate clinical experience (at 17 weeks). The six dimensions measured were leadership, teaching/collaboration, IPR/communication, professional development, planning/evaluation and critical care. There were significant increases in total Six-D scores between the control group and the experimental group (2.68 verses 2.92, t=2.5077, p=.0220). The experimental group had scores higher in teaching/collaboration and planning/evaluation than the control group. There were increased scores in all sub scale areas in the experimental group. This indicates that pre-graduate clinical experience was associated with increased evidence of behavior consistent with nursing performance. The authors felt, therefore, that role transition from student to professional nurse would be more smoothly facilitated.

Clayton, Broome & Ellis (1989) studied the relationship between a preceptorship experience and role socialization of
graduate nurses. They used a non-equivalent control group design. In this study nursing students were either paired with a preceptor (N=33) or participated in a traditional faculty supervised clinical experience (N=30). The study asked whether students in a preceptorship would report higher professional nurse performance (p < .05) than students who were not. Schwirian's Six-Dimension (Six-D) Scale of Nursing Performance was used. There were no differences in the groups when measured before the study. Immediately after the experience the precepted groups scored significantly higher in five of the six sub scales on the Six-D scale. Six months after graduation the preceptor groups scored higher than the traditional group in four of the six sub scale areas (critical care, planning/evaluation, teaching/collaboration and IPR/Communication). This study supported their hypothesis that working with a practicing nurse in the clinical environment, as opposed to a faculty member, enhanced the transition from student to staff nurse.

Olson, Gresley & Heater (1984) completed a study that looked at effects of an eight week undergraduate internship on self concept and professional role mastery of baccalaureate nursing students. The study determined if self concept and role were enhanced with the internship experience. Schwirian's Six Dimension Scale of Nursing Performance and the Tennessee Self-Concept Scale were used as the measurement tools. The sample (N=61) consisted of 15 experimental and 46 control group subjects. A pretest-
posttest design was used but only four weeks had elapsed from pretest to posttest. Statistical analysis was done using a one way analysis of variance. No significant differences were found between the groups for five of the dimensions of the Six Dimension Scale. These dimensions were teaching/collaboration, professional development, IPR/communication, leadership and critical care. There was a slight change in the planning/evaluation score between the two groups. The study had some limitations with small experimental group size compared to control group and in the short time frame of the externship experience.

Vanetzian & Higgins (1990) used Schwirian's Six Dimension Scale of Nursing Performance to compare new graduates' self-appraisal in their first nursing position with the appraisal by their evaluators (head nurse). The longitudinal, descriptive study used surveys done at six months and at one year. New graduates (N=67) rated themselves higher than their evaluators (N=67) at both time intervals and there were no significant sub scale statistics to validate greater performance in any given sub scale. The authors felt this study may indicate that graduate nurses have a high confidence and perceived skill level that may not be safe because they rated themselves higher than their evaluators.

Dobbs (1984) completed a study on senior preceptorships as a method for anticipatory socialization. Baccalaureate nursing students (N=103) were surveyed using Corwin's
Nursing Role Conception Scale. Corwin's likert type value scale isolates three components of each nurse's role values: service, bureaucratic and professional. The scale was administered prior to and just after the preceptorship experience. A significant decrease in total perceived role deprivation (p<.01) and a significant increase in the work-centered role conception (p<.01) indicated a change in student's self-image and role expectations as a result of the preceptorship experience.

Scheetz (1989) examined the effects of preceptorship programs on the development of clinical competence by senior baccalaureate students. Thirty-six students enrolled in a preceptorship program were compared to thirty-six students who worked in an ancillary nursing assistant role. Clinical competence was measured in a non-equivalent comparison pretest-posttest design. The Clinical Competence Rating Scale (CCRS) was developed and validated by Scheetz for the study. Clinical competence was defined as "the ability to utilize the problem-solving process, apply theory to practice and perform psychomotor skills" (p. 30). The students who participated in the preceptorship experience demonstrated a slightly higher gain in clinical competence (mean =4.58, SD =.38) than students who worked as nursing assistants (mean =4.14, SD =.65). Both groups reported that the experience in the work setting helped them improve their ability to solve problems, apply theory to practice and perform psychomotor skills.
Oermann and Navin (1991) examined the effects of externships offered collaboratively between schools of nursing and hospitals on the clinical competence of new graduates in their first nursing position. They used the Clinical Competence Rating Scale (CCRS) developed by Scheetz (1989) to compare the three areas of problem-solving, applying theory to practice and psychomotor skills. In this descriptive, correlational study both the students and the preceptors (24 pairs, N=48) completed the measurement tool. The study sample included both new graduates who had been externs and those who had not. Nurses who had been externs rated themselves significantly higher than those who were not externs on psychomotor performance (t=2.72, p=.013) and the total CCRS Score (t= 2.22, p=.04). Preceptor ratings, however, indicated no differences between the two groups.

Itano, Warren, & Ishida (1987) completed a study in which the professional and bureaucratic role concepts and role deprivation of students participating in a preceptorship program were compared to those in a traditional faculty supervised clinical group. The role conception and role deprivation of the nursing faculty and preceptors were also examined. The Corwin Nursing Role Conception Tool was used to measure the responses of 118 students, 24 staff nurse preceptors and 30 nursing faculty. Analysis of variance and t-test were used as statistical measures. Using ANOVA there were no differences in the professional and bureaucratic scores between the students.
Nursing faculty had a significantly higher ($p < .01$) professional role conception and a significantly lower bureaucratic role conception than preceptors but there was no difference in role deprivation between the groups. This may mean that students learn role concepts in both situations and are not able to see that one is more applicable to the realities of nursing performance.

Peirce (1991) conducted a study on how precepted students viewed their clinical experience. The qualitative, descriptive study used an anonymous questionnaire consisting of open-ended questions. The study focused on the student's view of the preceptorship experience. Both first year (N=29) and second year students (N=15) participated in the study. Content analysis was performed on responses. The focus of the student in the preceptor relationship was very different between the first year and second year respondents. Two theories emerged from the content analysis: a) what students desired from their clinical experience and b) the factors that influenced the experience. First year students were motivated to learn skills and role parameters. Second year students were more concerned with their own performance and professionalism. This study supports Benner's work in that as students gain experience they move from the novice stage toward the advanced beginner stage where they are able to move from limited and inflexible rules to identifying meaningful situational aspects.
McCloskey and McCain (1988) completed a study that compared four sets of performance data from two studies in which the Schwirian Six Dimension (Six-D) Scale of Nursing Performance was used. The scale has fifty two behaviors which are ranked by frequency and quality of performance. The purpose of the study was to identify those behaviors that were strong and those that were weakest in order to identify potential nursing behavior areas in which to concentrate educational focus in schools of nursing.

Head nurse rankings of staff nurse performance and staff nurse self appraisal were analyzed using Spearman correlation coefficients. Results were $r = .787$ and $.823$ in two sets of head nurse data and $r = .896$ and $r = .889$ in two sets of staff nurse data respectively. The findings between head nurses and staff nurses showed agreement on which skills nurses performed well and those that needed improvement. Those behaviors that nurses rated the highest were: accepts responsibility for actions; maintain high standards of self-performance; seek assistance when necessary; communicate a feeling of acceptance of each patient and a concern for the patient's welfare; display a generally positive attitude; assume new responsibilities within the limits of capabilities; perform technical procedures, (e.g. oral suctioning, tracheostomy care, intravenous therapy, catheter care, dressing changes); explain nursing procedures to a patient prior to performing them; identify and include immediate patient needs in the
plan of nursing care; and lastly, verbally communicate facts, ideas, and feelings to other health team members. Behaviors that had the lowest scores were: identify and use community resources in developing a plan of care for a patient and his family; communicate facts, ideas and professional opinions in writing to patients and their families; develop innovative methods and materials for teaching patients; identify and use resources within your health care agency in developing a plan of care for a patient and his family; plan for the integration of patient needs with family needs; identify and include in nursing care plans anticipated changes in patient's condition; use teaching aids and resource materials in teaching patients and their families; guide other health team members in planning for nursing care; promote the use of interdisciplinary persons; and lastly, use mechanical devices (e.g., suction machine, Gomco, cardiac monitor, respirator).

The findings suggest, based on the low ranking items that education at the senior or final semester level be more focused on teaching/collaboration, planning/evaluation and leadership skills. The specific skills identified with the highest ranking are those used daily in nursing and are basic tenets of all nursing curricula. It is safe to say that nursing programs provide basic aspects of care giving; it is the higher level behaviors that need to be assessed and greater focus is needed.
Related Articles

Schempp and Rompre (1986) provides a description of various types of transition programs. The article also summarized the effects of transition programs on the new graduate, the employing agencies and on the quality of patient care. The article states that transition programs were developed as a means of crisis intervention, implemented with the hope that they would prevent or reduce maladaptive coping behaviors of new graduates and at the same time facilitate the development of competence and confidence in the new graduates. It also discussed the results of a literature review and how much of the research done lacks empirical evaluation of the effects of transition programs on nursing performance. The article categorized the transition programs cited in the literature by type and the benefits to participants, the profession and the organizations that sponsor them.

Shamian and Inhaber (1985) reviewed twenty one articles on preceptor programs used by both schools of nursing and service institutions. The article provides details of various aspects of preceptor programs with emphasis on how to set up a program, select and train preceptors and determine content of preceptorship programs. The authors stated that many of the studies were descriptive and illustrate that the preceptor model in nursing is alive and well for both educational and orientation purposes. "The authors are convinced that the use of a preceptor model
provides a win-win situation where everyone stands to gain. The school of nursing gains because its graduates are better prepared for the work force. The hospital gains because turnover rate decreases and job satisfaction increases as does overall quality of care. The student gains because adjustment to the new environment becomes smooth and exciting instead of frustrating and grim" (p. 87). The conclusion of the article supported the need for more empirical data to justify use of preceptorships in nursing education and practice.

Summary

Although research has been completed on transition programs, each study has been very different. There has been a lack of consistency in the use of tools and methodology. Even though each study framework was reasonable, variables such as small population size or limited time frames reduced the validity of the conclusions in some of the studies completed. All of the studies support the need for transition programs as a means of providing reality based experiences for students. They also support the concept that transition programs enhance some aspect of nursing performance of the student or new graduate. Finally, all the studies suggest that programs that utilize a preceptor relationship in a service or practice setting will increase nursing performance. Acute care settings will continue to evaluate the need for programs that they sponsor for student nurses and will want
to know that their dollars help to make the graduate nurse more efficient, capable and socialized into the professional nursing role. What needs to occur is more replication of research to empirically validate these findings.

**Conceptual Framework**

In the 1970's Marlene Kramer did extensive research on the bureaucratic/professional role conflict of nurses and the concept of reality shock. Although she still is quoted in the literature, a more recent study and practice model has emerged. This is the work of Patricia Benner (1979, 1983, 1984, 1992). The goals of her work were, "to document the conflicting views that nurse educators and nurse employers have about the work role and competency of the newly graduated nurse; to identify and delineate the difficulties that many nurses experienced in their first jobs; to present effective work-entry procedures to help overcome school-to-work transition problems; and to offer educational strategies that can be used by those in both service and academic settings in planning programs that will reduce many of the new nurse difficulties" (p. 25).

Benner (1979) began her work by completing a paired interview research study jointly with her husband. The study obtained data from nurse managers, nurse educators and new graduates in order to determine the important values and attributes of the new nurse. The identified values as described by the three groups made clear that bureaucratic/role conflict is real. The expectations of
each of the three groups were very different in the areas of role, skill competency and socialization (See Figure 1).

Benner (1984) applied the Dreyfus Model of Skill Acquisition to nursing practice. The Dreyfus Model of Skill Acquisition distinguishes between levels of skill performance that can be achieved through principles and theory learned in a classroom and the context dependent judgments and skill that can be acquired only in real situations. She states "while the Dreyfus model outlines the process of advancement from novice to expert based on experience, the model assumes that theory and principles allow the practitioner safe and efficient access to clinical learning, provides the background knowledge that enables the clinician to ask the right questions and look for the correct problems. The person with limited background knowledge will lack the tools needed to learn from experiences." (p. 184).

Experience is the refinement of preconceived notions and theory through encounters with many actual and practical situations that add nuances or shades of difference to theory. An important assumption of the Dreyfus model is that with experience skills are developed which results in improvement in performance.
FIGURE 1: CONCEPTUAL FRAMEWORK

Faculty Expectations

- Focus on Patient Care
- Idealized View of Nursing
- Clear Objectives & Goals

Nurse Manager Expectations

- Workplace Demands
- Realistic view of Nursing
- Ambiguous Objectives & Goals

Nurse Extern Novice

- Need for Professional Identity
- Acculturation
- Dilemma of Reality vs. Ideals
- New Value Expectations

Extern Program

Advanced Beginner

In order to acquire and develop nursing skill, the nurse passes through five levels of development: novice, advanced beginner, competent, proficient and expert. In their study, Benner & Benner (1979) identified differences in clinical performance and situation appraisals between beginning and expert nurses. From the results of their work it became possible to describe the performance characteristics at each level of skill development of the nurse. These characteristics are described below as they appear in Benner (1984):

Stage 1: Novice

Beginners have had no experience in the situations in which they are expected to perform. Novices are taught context-free rules to guide actions in respect to different attributes. This rule-governed behavior is extremely limited and inflexible. Following rules, in reality, will limit performance success because rules will not illustrate the more relevant tasks to perform in an actual situation. Nursing students enter a new clinical area as novices; they have little understanding of the contextual meaning of recently learned textbook terms (p. 21).

Stage 2: Advanced Beginner

Advanced beginners are those that can demonstrate marginally acceptable performance, and have coped with enough real situations to note (or to have pointed out to them by a mentor) the recurring meaningful situational aspects. Aspects, in contrast to measurable context-free
attributes that are learned and used by the beginner, require prior experience in actual situations for recognition. Aspects include overall, global characteristics that can be identified only through prior experience. Novices and advanced beginners can take in little of the situation; it is too new, too strange, and besides they have to concentrate on remembering the rules they have been taught. Advanced beginners have approximately one year of experience (p. 22).

Stage 3: Competent

Competence, typified by the nurse who has been on the job in the same or similar situations two to three years, develops when the nurse begins to see his or her action in terms of long-range goals or plans of which he or she is consciously aware. The plan dictates which attributes and aspects of the current and contemplated future situations are to be considered most important and those which can be ignored. The competent nurse lacks the speed and flexibility of the proficient nurse but does have a feeling of mastery and the ability to come with and manage the many contingencies of clinical nursing. The conscious, deliberate planning that is characteristic of the skill level helps achieve efficiency and organization (p. 25).

Stage 4: Proficient

The proficient nurse perceives situations as wholes rather than in terms of aspects. Performance is guided by maxims. Maxims reflect what would appear to the competent
or novice performer as unintelligible nuances of the situation; they can mean one thing one time and quite another thing later. When the nurse has a deep understanding of the situation, the maxim provides directions as to what must be taken into consideration (p. 27).

Stage 5: **Expert**

The expert nurse no longer relies on analytic principles to connect understanding of the situation to an appropriate action. The expert nurse, with an enormous background of experience, has an intuitive grasp of each situation and zeroes in on the accurate region of the problem without wasteful considerations of a large range of unfruitful, alternative diagnoses and solutions. The expert operates from a deep understanding of the total situation (p. 31).

Novice and advanced beginner stages were used to help describe externship behaviors. Externship/preceptorships provide the opportunity for nursing students to gain experience and skill acquisition that move them from the novice level to the advanced beginner level. Benner's work (1984) helped to identify specific behaviors exhibited as students move from the novice to the advanced beginner stage.

There are seven domains of practice that Benner (1984) identified as a result of her research and analysis of critical incidents of expert nursing practice in acute care.
settings. These domains of practice are: the helping role, the teaching-coaching function, the diagnostic and monitoring function, effective management of rapidly changing situations, administering and monitoring therapeutic interventions and regimens, monitoring and ensuring the quality of health care practices and organizational and work-role competencies.

The domains of practice were measured in the study by using Schwirian's (1978) Six Dimension Scale of Nursing Performance. The six dimensions identified by Schwirian are as follows: teaching/collaboration, leadership, critical care, planning/evaluation, IPR/communication and professional development. These dimensions closely correspond with the seven domains of practice of Benner (See Figure 2).

According to Benner (1983), "Expertise develops when the clinician tests and refines propositions, hypotheses and principle-based expectations in actual practice situations. Experience results when preconceived notions and expectations are challenged, refined or disconfirmed by an actual situation. Therefore, experience is a requisite for expertise. The problem solving of a nurse who is proficient or expert is different than the problem approach of the beginner. This difference can be attributed to "know how" which is acquired through experience" (p. 52). Because Schwirian's Six Dimension Scale reflects current, relevant
nursing performance it was effectively used to determine if nurse externs would gain in nursing behaviors.

**Figure 2**

**Comparison of Benner's Domains of Practice with Schwirian's Six Dimensions of Nursing Performance**

<table>
<thead>
<tr>
<th>BENNER</th>
<th>SCHWIRIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping Role</td>
<td>Interpersonal Relations/Communication</td>
</tr>
<tr>
<td>Teaching/Coaching Function</td>
<td>Teaching/Collaboration</td>
</tr>
<tr>
<td>Diagnostic and Monitoring Function</td>
<td>Critical Care</td>
</tr>
<tr>
<td>Effective Management of Rapidly Changing Situations</td>
<td>Leadership</td>
</tr>
<tr>
<td>Administering and Monitoring Therapeutic Interventions and Regimens</td>
<td>Planning/Evaluation</td>
</tr>
<tr>
<td>Monitoring and Ensuring the Quality of Health Care Practices</td>
<td>Professional Development</td>
</tr>
<tr>
<td>Organizational and Work-Role Competencies</td>
<td>Professional Development</td>
</tr>
</tbody>
</table>

**Hypotheses**

Using Schwirian's Six Dimension Scale of Nursing Performance it is hypothesized that:

1) There would be a significant increase on the overall Six Dimension Scale frequency score from the beginning to the end of the externship experience (p < .01).
2) There would be a significant increase on the overall Six Dimension Scale quality score from the beginning to the end of the externship experience (p < .01).

3) There would be a significant increase in frequency score on the critical care sub scale from the beginning to the end of the externship experience (p < .01).

4) There would be a significant increase in quality score on the critical care sub scale from the beginning to the end of the externship experience (p < .01).

5) There would be a significant increase in the frequency score of the planning/evaluation sub scale from the beginning to the end of the externship experience (p < .01).

6) There would be a significant increase in the quality score of the planning/evaluation sub scale from the beginning to the end of the externship experience (p < .01).

7) There would be a significant increase in the frequency score on the teaching/collaboration sub scale from the beginning to the end of the externship experience (p < .01).

8) There would be a significant increase in the quality score on the teaching/collaboration sub scale from the beginning to the end of the externship experience (p < .01).

9) There would be a significant increase in the frequency score on the leadership sub scale from the beginning to the end of the externship experience (p < .01).
10) There would be a significant increase in the **quality score** on the **leadership** sub scale from the beginning to the end of the externship experience \((p < .01)\).

11) There would be a significant increase in the **frequency score** on the **IPR/Communication** sub scale from the beginning to the end of the externship experience \((p < .01)\).

12) There would be a significant increase in the **quality score** on the **IPR/Communication** sub scale from the beginning to the end of the externship experience \((p < .01)\).

13) There would be a significant increase in the **quality score** on the **professional development** sub scale from the beginning to the end of the externship experience \((p < .01)\).

**Definitions of terms**

1) Extern: Nursing student who participates in a summer nurse extern program. The student has completed at least one clinical course in an accredited school of nursing.

2) Extern Program: Hospital based summer program designed to improve the student's knowledge and performance through a variety of experiences in hands on patient care under the direct supervision of a preceptor. The hospital was responsible for hiring the extern and selecting the preceptor for the experience.

3) Nursing Performance: Ability to deliver nursing care and to demonstrate behavior in all of the following performance areas: teaching/collaboration, critical care, professional development, IPR/communication, leadership and planning/evaluation.
4) Preceptor: An experienced registered nurse who provided direct supervision of the nurse extern on a patient care unit.
CHAPTER III
METHODOLOGY

Design
A pretest-posttest design was used to test the hypotheses in the study. It was hypothesized that the extern program would increase nursing performance. An anonymous, self-administered measurement tool was used to measure six aspects of nursing performance.

Study Sites
Seven hospitals in Southwestern Michigan were contacted to participate in the study. All the hospitals were JCAHO accredited institutions. Four were teaching hospitals. The size of the institutions ranged from 225 beds to 534 beds. All seven hospitals were responsible for the hiring of the nurse externs and selecting preceptors. All nurse extern program overviews, job descriptions and objectives were reviewed to ensure they provided a preceptorship relationship with direct one-on-one supervision for the nurse extern during the entire summer experience. One hospital was excluded from the study because its program consisted of a four to six week preceptor relationship followed by working in an ancillary support role for the remainder of the summer.

All of the extern programs used in the study provided an orientation phase. This ranged from three days to one week and included general orientation topics like infection
control, fire safety, documentation guidelines, overview of job responsibilities and preceptor/extern relationship. All of the extern programs had scheduled times when externs were approached to determine how the experience was progressing. This may have been through contact with the nurse educators on the patient care units or in a formalized gathering of all the externs. Two of the extern programs held classroom activities every two weeks in the form of skills labs or lecture/discussion sessions on critical thinking, prioritizing and risk management concepts.

Subjects

A total convenience sample of eighty-five students employed in summer extern programs during the summer months in 1992 at six hospitals in Southwestern Michigan were approached for the study. Sixty seven students completed the pretest (77 percent). Forty five students completed the posttest (52 percent). Sample size for the study was N = 45 because both a pretest and a posttest from a student was needed for statistical analysis. All the subjects were at least eighteen years of age and able to read and write English as evidenced by their acceptance into a nursing curriculum. The students had completed at least one clinical course within their nursing curriculum. The nurse extern sample size was fairly homogeneous with sixteen of the students being between 18-21 years of age, seventeen being between the ages of 22-25 years of age. Forty one of the respondents were female in gender, four were male.
Twenty nine students were single, fifteen were married and one was divorced (See Table 1).

Both age and gender can affect the internal validity of the study as the perceptions of nursing care are affected by application of life experiences to clinical experiences.

Table 1

<table>
<thead>
<tr>
<th>Demographic Data of Students in Summer Nurse Extern Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>18-21 (N=16)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Male (N=4)</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
</tr>
<tr>
<td>Married (N=15)</td>
</tr>
</tbody>
</table>

The majority of the students were from a BSN nursing program (N=32) versus an ADN program (N=10) or a diploma school of nursing (N=3). Fifteen were graduating in December of 1992, twenty-eight in Spring of 1993 and two in December of 1993.

The data supported the concept in the literature that many student nurses come to their educational experience with various types of nursing related experience (Peirce, 1991). Forty nine percent (N=23) of the nurse externs had
worked in some type of nursing related job role prior to beginning nursing school. Roles included being a nurse aide (11%), unit secretary (7%), hospital volunteer (18%), and other roles like EMT or surgery transport (18%). Fifty percent (N=24) of the nurse externs continued to work during their nursing school experience. Roles included being a nurse aide (13%), unit secretary (3%), home health aide (3%), hospital volunteer (4%) and other roles like operating room transport and EMT (11%) (See Table 2).

Table 2

<table>
<thead>
<tr>
<th>Work Experience of Nurse Externs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior to Externship</strong></td>
</tr>
<tr>
<td>Years Of Experience 0 &lt;1 1-2 3-4 &gt; 5</td>
</tr>
<tr>
<td>N=22 N=6 N=10 N=3 N=4</td>
</tr>
<tr>
<td>Type of Experience* N NA EP HHA US V 0</td>
</tr>
<tr>
<td>8 13 1 3 3 9 8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>During Nursing School</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Work** N PT FT FT/S FT/S-PT/SC</td>
</tr>
<tr>
<td>N=12 N=11 N=2 N=45 N=11</td>
</tr>
<tr>
<td>Type of Experience* N NA EP HHA US V 0</td>
</tr>
<tr>
<td>8 12 0 1 2 2 8</td>
</tr>
</tbody>
</table>

*N=none, NA=nurse aide, EP=extern program, O=other HHA=home health aide, US=unit secretary, V=volunteer

Four of the hospitals employed the nurse externs full time during the extern experience. Two hospitals allowed students to work part-time and a variety of hours per week. The amount of hours worked per week influenced the clinical

34
experience gained. Forty of the externs (89%) worked full time with hours ranging from 32-40 hours per week. Five students (11%) worked part time with hours ranging from 16-24 hours per week (See Table 3).

Table 3

Nurse Extern Hours of Employment

<table>
<thead>
<tr>
<th></th>
<th>Full Time</th>
<th>Part Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>32-40</td>
<td>16-24</td>
</tr>
<tr>
<td>N</td>
<td>40</td>
<td>5</td>
</tr>
</tbody>
</table>

Instrument

The Six Dimension Scale of Nursing Performance (Six-D Scale) developed by Patricia Schwirian (1978) was used for the study. The written permission of Patricia Schwirian was obtained (See Appendix A). The original scale had been reviewed in 1991 and is still in use as originally developed. She established construct validity through consensus among tool developers, consultants and pilot respondents. The development process included refining constructs, concepts and measures described in materials researched for the literature review; materials and instruments shared by other investigators and educators upon request; operational definitions of "effective nursing performance" and "a successful nurse" provided by responding deans or directors of 151 basic schools of nursing; review of the developing scale and subsequent recommendations by immediate colleagues, project consultants...
(a group of knowledgeable and experienced nurse educators, researchers and administrators), and the individuals who served as pilot respondents.

The instrument consists of 52-four point rating scale items grouped into six performance sub scales: leadership (5 items), critical care (7 items), teaching/collaboration (11 items), planning/evaluation (7 items), interpersonal relations/communication (12 items) and professional development (10 items). Respondents were asked to respond to 42 of the items using two different response scales. The first response scale measures frequency with ratings of: 1= not expected to perform, 2= never or seldom, 3= occasionally and 4= frequently. The second response scale measures quality with ratings of 1= not very well, 2= satisfactorily, 3= well and 4= very well. Ten items in the sub scale of professional development are measured in quality only (See Appendix B).

Reliability of the tool was computed for each of the six sub scales using Chronbach’s alpha. The alpha coefficients ranged in value from a low of .844 for leadership to .978 for the professional development sub scale. The uniformly high values of the Six-D sub scales attest to its potential utility for assessing nursing performance (Schwirian, 1978).
Procedure

Approval was obtained from the Human Research Review Committee at Grand Valley State University to use the Six Dimension Scale of Nursing Performance for the study (See Appendix C). Seven hospitals in Southwestern Michigan were contacted to participate in the study. All seven hospitals verbalized a great interest in the subject area and agreed to participate. One hospital was excluded from the study after reviewing program overviews, job descriptions and objectives because the extern/preceptor relationship would only last four or six weeks, not the entire summer. Nursing research committee approval was obtained in each hospital setting (See Appendix D).

Pretest data collection was done during May and June of 1992. In five of the six hospitals, measurement tools were distributed to the nurse externs during an orientation classroom experience. Data collection for the other hospital was done by direct mail to the nurse externs through the Human Resources Department because classroom activities were already completed and students were on their respective units for one week. Posttest data was collected in August and September of 1992 during classroom activities at four hospitals and direct mail distribution at the remaining two hospitals. Any students who were not in attendance at the concluding classroom activities were sent a measurement tool via direct mail. Pretest and posttest
measurement tools were matched by a coding system. Nurse extern coordinators kept the lists of student names and assigned codes to ensure anonymity. These coordinators did not have knowledge of which students actually returned the measurement tool.

A verbal script was used to describe the study, explain the risks and benefits and the procedure for data collection (See Appendix E). A letter of explanation describing the study, risks and benefits and the procedure for data collection was attached to the measurement tool used for direct mail for the pretest (See Appendix F) and for posttest data collection (See Appendix G). Data collection in the classroom was obtained by allowing 20 minutes to complete the measurement tool. An envelope was provided in the room for students to return the tool. Self addressed, stamped envelopes were provided by the researcher for the mailings. Nurse educators or nurse extern program coordinators were elicited to remind those nurse externs participating by direct mail to complete the survey.
Chapter IV
RESULTS AND DATA ANALYSIS

Interpretation of the Data

Results from the data analysis will be described. Each hypothesis will be discussed with the findings to either support or not support the hypothesis presented.

There were forty five pairs of data collected from the pretest-posttest design (N=45). The measurement tool was used to collect data in six areas of nursing performance: leadership (5 items); teaching/collaboration (11 items); professional development (10 items); IPR/communication (12 items); planning/evaluation (7 items); and critical care (7 items). Rating scales were used to determine quality of the behaviors in each of the six sub scales of nursing performance. Frequency ratings were obtained in all the sub scale dimensions except professional development (See Appendix B).

It was hypothesized that there would be an increase in the total score in both frequency and quality from pretest to posttest. It was also hypothesized that there would be increased frequency scores in the five subscales described above and increased quality scores in all six of the sub scales from pretest to posttest. The paired t-test was used to determine the statistical significance between mean scores from the pretest and the posttest.
Reliability of the measurement tool was established at a range of .740 (leadership sub scale) to .902 (critical care sub scale) for the six dimensions. By dimension the reliability results were: teaching/collaboration (Alpha =.894); planning/evaluation (Alpha =.793); leadership (Alpha =.740); IPR/communication (Alpha =.806); critical care (Alpha =.902); professional development (Alpha =.824). Reliability of the instrument when established by Schwirian ranged from .844 (leadership sub scale) to .978 (professional development sub scale).

Hypothesis One

The first hypothesis, there would be a significant increase on the overall Six-D scale frequency score from the beginning to the end of the externship experience, was supported (t=4.07, df=44, p=.000). The paired t-test was the statistical measure used to determine the statistical difference between the mean scores from the pretest and the posttest (See Table 4).

Table 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Frequency Mean</th>
<th>SD</th>
<th>t-score</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>15.058</td>
<td>1.765</td>
<td>4.07</td>
<td>44</td>
<td>.000</td>
</tr>
<tr>
<td>Posttest</td>
<td>16.098</td>
<td>1.848</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis Two

The second hypothesis stated that there would be a significant increase in the overall Six-D quality score from
the beginning to the end of the externship experience. This hypothesis was supported by the data (t=9.29, df=44, p=.000) (See Table 5).

Table 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Quality Mean</th>
<th>SD</th>
<th>t-score</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>17.441</td>
<td>2.558</td>
<td>9.29</td>
<td>44</td>
<td>.000</td>
</tr>
<tr>
<td>Posttest</td>
<td>20.011</td>
<td>1.970</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean scores were higher from pretest to posttest. Both frequency and quality total scores were significantly higher which supports the findings in the literature that exposure to clinical experience increases performance of nursing skills (Benner & Benner, 1979; Peirce, 1991; Scheetz, 1989).

Hypotheses Three, Five, Seven, Nine and Eleven

These hypotheses stated that there would be a significant increase in frequency scores by sub scale in the sub scales of teaching/collaboration (H3), planning/evaluation (H5), leadership (H7), IPR/communication (H9) and critical care (H11). Statistical significance was set at p <.01 for the hypotheses. The nurse externs rated themselves higher in frequency in all the sub scales from pretest to posttest. The largest difference in mean score was in the sub scale of critical care. The results using the paired t-test showed
statistical significance only in the sub scale of critical care (t=3.03, p=.004). This data supports the fact that the amount of practice with psychomotor skills during the externship experience was enough to result in a significant increase by posttest. The IPR/Communication sub scale was close to being significant with a probability of .014 (See Table 6).

Table 6

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pretest (SD)</th>
<th>Posttest (SD)</th>
<th>t-score</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>T/C(H3)</td>
<td>2.804 (.506)</td>
<td>2.984 (.580)</td>
<td>2.23</td>
<td>.031</td>
</tr>
<tr>
<td>P/E(H5)</td>
<td>3.117 (.502)</td>
<td>3.279 (.419)</td>
<td>2.27</td>
<td>.028</td>
</tr>
<tr>
<td>L(H7)</td>
<td>2.689 (.697)</td>
<td>2.957 (.644)</td>
<td>2.40</td>
<td>.020</td>
</tr>
<tr>
<td>IPR/C(H9)</td>
<td>3.578 (.283)</td>
<td>3.700 (.245)</td>
<td>2.56</td>
<td>.014</td>
</tr>
<tr>
<td>C/C(H11)</td>
<td>2.870 (.652)</td>
<td>3.178 (.529)</td>
<td>3.03</td>
<td>.004*</td>
</tr>
</tbody>
</table>

Key: T/C=Teaching/Collaboration, P/E=Planning/Evaluation, L=Leadership, IPR/C=Interpersonal Relations/Communication, C/C=Critical Care

*p: p < .01.

Hypotheses Four, Six, Eight, Ten, Twelve and Thirteen

These six hypotheses addressed the assumption that there would be a significant increase in the quality score on each of the six sub scales from the beginning to the end of the externship experience. Probability was set at p < .01 for the hypotheses. The nurse externs rated themselves higher in quality in all six sub scales from pretest to post test (See Table 7).
Table 7
Paired t-test Results for Sub Scale Quality Mean Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pretest (SD)</th>
<th>Posttest (SD)</th>
<th>t-score</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T/C(H4)</td>
<td>2.617 (.622)</td>
<td>2.988 (.479)</td>
<td>4.60</td>
<td>.000*</td>
</tr>
<tr>
<td>P/E(H6)</td>
<td>2.663 (.552)</td>
<td>3.136 (.519)</td>
<td>5.73</td>
<td>.000*</td>
</tr>
<tr>
<td>L(H8)</td>
<td>2.814 (.550)</td>
<td>3.284 (.455)</td>
<td>5.43</td>
<td>.000*</td>
</tr>
<tr>
<td>IPR/C(H10)</td>
<td>3.193 (.425)</td>
<td>3.572 (.346)</td>
<td>7.58</td>
<td>.000*</td>
</tr>
<tr>
<td>C/C(H12)</td>
<td>2.836 (.617)</td>
<td>3.346 (.439)</td>
<td>6.19</td>
<td>.000*</td>
</tr>
<tr>
<td>P/D(H13)</td>
<td>3.291 (.417)</td>
<td>3.673 (.281)</td>
<td>7.87</td>
<td>.000*</td>
</tr>
</tbody>
</table>

Key: T/C =Teaching/Collaboration, P/E=Planning/Evaluation, L=Leadership, IPR/C=Interpersonal Relations/Communication, C/C=Critical Care, P/D=Professional Development
*p: p<.01

Individual sub scale behaviors were examined to determine those which the students developed the most and those that were the least developed. The ten nursing behaviors with the highest mean quality score at the completion of the nurse extern experience included five nursing behaviors from IPR/communication, one from critical care, and four from professional development (See Table 8).
### Table 8

**Nursing Behaviors with the Highest Quality Mean Score**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Behavior</th>
<th>Posttest Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPR/C</td>
<td>Seeks assistance when necessary</td>
<td>3.845</td>
</tr>
<tr>
<td>IPR/C</td>
<td>Promotes the patient's right to privacy</td>
<td>3.739</td>
</tr>
<tr>
<td>P/D</td>
<td>Accepts responsibility for own actions</td>
<td>3.733</td>
</tr>
<tr>
<td>IPR/C</td>
<td>Communicates a feeling of acceptance of each patient and concern for the patient's welfare</td>
<td>3.722</td>
</tr>
<tr>
<td>P/D</td>
<td>Displays a generally positive attitude</td>
<td>3.711</td>
</tr>
<tr>
<td>C/C</td>
<td>Uses mechanical devices e.g. suction, Gomco, monitors, vents</td>
<td>3.689</td>
</tr>
<tr>
<td>P/D</td>
<td>Assumes new responsibilities within the limits of capabilities</td>
<td>3.645</td>
</tr>
<tr>
<td>IPR/C</td>
<td>Contributes to an atmosphere of mutual trust</td>
<td>3.628</td>
</tr>
<tr>
<td>IPR/C</td>
<td>Explains nursing procedures to patients before performing them</td>
<td>3.600</td>
</tr>
<tr>
<td>P/D</td>
<td>Uses learning opportunities for ongoing personal/professional growth</td>
<td>3.589</td>
</tr>
</tbody>
</table>

Key: IPR/C = Interpersonal relations/communication  
C/C = critical care, P/D = professional development

Analysis of the data also revealed the nursing behaviors in which the students had the lowest mean score for quality.
These included three from the teaching/collaboration sub scale, two from the critical care sub scale, three from the leadership sub scale and two from the planning/evaluation sub scale (See table 9).

Table 9

Nursing Behaviors with the Lowest Quality Mean Score

<table>
<thead>
<tr>
<th>Scale</th>
<th>Behavior</th>
<th>Posttest Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>T/C</td>
<td>Communicate facts, ideas and professional opinions in writing to patients and families</td>
<td>2.449</td>
</tr>
<tr>
<td>C/C</td>
<td>Performs appropriate measures in emergency situations</td>
<td>2.584</td>
</tr>
<tr>
<td>T/C</td>
<td>Identify and use community resources in developing a plan of care</td>
<td>2.604</td>
</tr>
<tr>
<td>L</td>
<td>Guide other health team members in planning for nursing care</td>
<td>3.654</td>
</tr>
<tr>
<td>T/C</td>
<td>Develops innovative methods and materials for teaching patients</td>
<td>2.661</td>
</tr>
<tr>
<td>C/C</td>
<td>Recognize and meet the emotional needs of the dying patient</td>
<td>2.674</td>
</tr>
<tr>
<td>L</td>
<td>Delegate responsibility for care</td>
<td>2.682</td>
</tr>
<tr>
<td>L</td>
<td>Give praise and recognition to those under his/her direction</td>
<td>2.707</td>
</tr>
<tr>
<td>P/E</td>
<td>Coordinate plan of care with medical plan</td>
<td>2.858</td>
</tr>
<tr>
<td>P/E</td>
<td>Initiate planning and evaluation of nursing care</td>
<td>2.870</td>
</tr>
</tbody>
</table>

Key: T/C = Teaching/Collaboration, C/C = Critical Care, L = Leadership, P/E = Planning/Evaluation
In a study by McCloskey and McCain (1988), there were ten nursing behaviors identified as most important by both staff nurses and head nurses for beginning level practice. In analysis of data for this study, it was found that the ten areas rated highest by the nurse extern group was closely related to those behaviors identified by McCloskey and McCain (1988) (See Table 10).

In the study by McCloskey and McCain there were also ten nursing behaviors that were ranked least important by both staff nurses and head nurses for beginning level practice. The behaviors ranked lowest by the nurse externs in this study were also closely related to those identified by McCloskey and McCain (1988) (See Table 11).

**Summary of Hypothesized Testing**

Several of the hypotheses were supported. The results of the study revealed that the summer extern experience did increase the psychomotor skill performance as well as other aspects of nursing performance.

The first hypothesis, there would be a significant increase on the overall Six-D frequency score from the beginning to the end of the externship experience was supported. There was an increase in mean scores from pre-test to posttest and the scores obtained by paired t-test analysis were statistically significant (t=4.07, p=.000).
Table 10

Comparison of Top Ten Rated Nursing Behaviors
Beginning with the Highest Ranked Behavior

<table>
<thead>
<tr>
<th>McCloskey and McCain</th>
<th>Findings of this Study (Coke)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepts Responsibility for own actions</td>
<td>Seeks Assistance When Necessary</td>
</tr>
<tr>
<td>Maintain High standards of self-performance</td>
<td>Promotes the patient's right to privacy</td>
</tr>
<tr>
<td>Seeks Assistance when Necessary</td>
<td>Accepts responsibility for own actions</td>
</tr>
<tr>
<td>Communicates a feeling of acceptance of each patient and a concern for the patient's welfare</td>
<td>Same as McCloskey and McCain</td>
</tr>
<tr>
<td>Displays a generally positive attitude</td>
<td>Same as McCloskey and McCain</td>
</tr>
<tr>
<td>Assume new responsibilities within the limits of capabilities</td>
<td>Uses mechanical devices (e.g. suction, Gomco, monitors</td>
</tr>
<tr>
<td>Perform technical procedures (e.g., oral suctioning, trach care, IV therapy, catheters)</td>
<td>Assumes new responsibilities within the limits of capabilities</td>
</tr>
<tr>
<td>Explain nursing procedures to a patient prior to performing them</td>
<td>Contributes to an atmosphere of mutual trust</td>
</tr>
<tr>
<td>Identify and include immediate patient needs in the plan of nursing care</td>
<td>Explains nursing procedures to patients before performing them</td>
</tr>
<tr>
<td>Verbally communicate facts, ideas, and feelings to other health team members</td>
<td>Uses learning opportunities for ongoing personal and professional growth</td>
</tr>
</tbody>
</table>
Table 11
Comparison of Lowest Ranked Nursing Behaviors
Beginning with the Lowest Ranked Behavior

<table>
<thead>
<tr>
<th>McCloskey and McCain</th>
<th>Findings of This Study (Coke)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and use community resources in developing a plan of care for a patient and his family</td>
<td>Communicate facts, ideas and professional opinions in writing to patients and families</td>
</tr>
<tr>
<td>Communicate facts, ideas and professional opinions in writing to patients and families</td>
<td>Performs appropriate measures in emergency situations</td>
</tr>
<tr>
<td>Develop innovative methods and materials for teaching patients</td>
<td>Identify and uses community resources in developing plan of care</td>
</tr>
<tr>
<td>Identify and uses community resources in developing plan of care</td>
<td>Guide other health team members in planning for nursing care</td>
</tr>
<tr>
<td>Plan for the integration of patient needs with family needs</td>
<td>Develops innovative methods and materials for teaching patients</td>
</tr>
<tr>
<td>Identify and include in nursing care plans anticipated changes in patient condition</td>
<td>Recognize and meet the emotional needs of the dying patient</td>
</tr>
<tr>
<td>Use teaching aids and resources in teaching patients and families</td>
<td>Delegate responsibility for care</td>
</tr>
<tr>
<td>Guide other health team members in planning for nursing care</td>
<td>Give praise and recognition to those under his/her direction</td>
</tr>
<tr>
<td>Promote the use of interdisciplinary persons</td>
<td>Coordinate plan of care with the medical plan of care</td>
</tr>
<tr>
<td>Use mechanical devices (e.g. suction, Gomco, monitors, ventilators)</td>
<td>Initiate planning and evaluation of nursing care</td>
</tr>
</tbody>
</table>
The second hypothesis which addressed that there would be an increase in quality score from the beginning to the end of the externship experience was also statistically significant ($t=9.29$, $p=.000$). These two hypotheses support the assumption that clinical experience with a preceptor increased exposure to and experience with many nursing performance behaviors.

There were five hypotheses that stated there would be a significant increase in frequency scores in the sub scales of teaching/collaboration (H7), planning/evaluation (H5), leadership (H9), IPR/Communication (H11), and critical care (H3). Although the mean scores increased from pretest to posttest in all the sub scales only the critical care sub scale was statistically significant ($t=3.03$, $p=.004$). Therefore, of hypotheses three, five, seven, nine and eleven, only hypothesis three, that there would be an increase in frequency score in the critical care sub scale has been supported. The other four were not supported.

Six hypotheses addressed the possibility that there would be a significant increase in quality scores in the six sub scales of teaching/collaboration (H8), planning/evaluation (H6), leadership (H10), IPR/communication (H12), critical care (H4), and professional development (H13). The mean scores increased in all six sub scales from pretest to posttest. All six
hypotheses were statistically significant and were supported.

Because the quality scores were increased, the findings support the impact of the nurse extern experience on increased nursing performance. The findings also support an increase in the confidence of the nurse extern by the end of the externship experience because even though the frequency scores were not statistically significant in all sub scales, the quality scores were increased in all sub scales. The students gained confidence in their nursing performance as evidenced by rating themselves higher in quality scores in all sub scales at posttest.
CHAPTER V

DISCUSSION AND IMPLICATIONS OF STATISTICAL FINDINGS

Discussion of Findings

This study examined the effect of summer nurse extern programs on the nursing performance of student nurses. The Six Dimension Scale of Nursing Performance was used to determine frequency in five sub scales of nursing performance: leadership, teaching/collaboration, planning/evaluation, critical care, and interpersonal relations/communication. Quality measures were obtained in the five sub scales listed above and the dimension of professional development. Total scale quality and frequency scores were also analyzed. The students experienced increased total mean quality scores and total mean frequency scores from pretest to posttest that were supported statistically. Sub scale frequency mean scores were increased in all dimensions from pretest to post test but only the critical care sub scale was statistically significant. Quality sub scale mean scores were increased in all six dimensions and all sub scales were statistically significant from pretest to posttest.

The findings support that working with a practicing nurse in the clinical environment enhanced the nursing performance of the nurse externs and increased their ability to perform psychomotor skills. The literature, although not strongly empirical, supports the success of externships in
increasing confidence in performing psychomotor skills and in interacting with patients, families and health care members (Bizek & Oermann, 1991; Clayton, Broome & Ellis, 1989; Jairath, Costello, Wallace, & Rudy, 1985; Olson, Gresley & Heater, 1984; Oermann & Navin, 1991; Scheetz, 1989; Shamian & Inhaber, 1985). The experience gained in working with patients in a hospital may be an important element in increasing the nurse's confidence and developing essential patient care skills. This will allow the student to move from the novice level to the advanced beginner level and hopefully ease the transition from school to work upon graduation. Because the data supports an increase in the quality of and frequency of the six areas of nursing performance, the study supports the research question that nursing performance of student nurses in summer extern experiences does increase by the completion of the externship experience.

The convenience sample (N=45) was derived from student nurses who were employed in six different hospital based summer nurse extern programs. The institution was responsible for hiring the externs and for selecting preceptors. The personal nursing philosophy, educational background and ability of these preceptors to teach students would have had an effect on the externship relationship and how the students rated themselves.

The sample of students (N=45) was primarily from baccalaureate schools of nursing (n=32), although there
were participants from associate (n=10) and diploma schools of nursing (n=3). Each of these programs have philosophical differences in approach and levels of involvement and responsibility for patient care. Each student brings a unique set of skills and level of knowledge to the externship. McCloskey & McCain (1988) examined newly graduated staff nurses and head nurses using Schwirian's Six Dimension Scale. They found that there were few differences by educational group. The largest difference was in the performance of critical care skills. Diploma nurses had the highest mean scores in critical care, the associate degree had the next highest mean score and the baccalaureate students had the lowest overall mean score in the critical care sub scale.

The majority of participants were single and between the ages of eighteen and twenty five. Fifty two percent entered the externship with some type of previous nursing related experience. Jairath, Costello, Wallace and Rudy (1985), in their study of a preceptorship for students in a diploma program, found that the majority of students had worked in some kind of health care position. The authors suggested that this work experience may have facilitated early transition to the professional nursing role and minimized the preceptorship impact.

This researcher believes that more research is indicated to compare outcomes of externships and work experience. This is an important area for research in order
to specifically determine how the externship is different from other types of health care related work experiences. Because there continues to be budgetary constraints in acute care settings, there needs to be empirical research to support programs like nurse externships. These programs are expensive and practice settings want to know if the outcome is worth it. Many acute care settings are hiring student nurses in a variety of ancillary support roles that are less costly. Empirical research needs to be done to determine the types of skills and behaviors the student nurse develops in support roles and compare these with the skills and behaviors developed during an externship.

Practice settings want to employ new graduates that are able to function effectively. The findings of this study support that the nurse externship did improve the quality of performance in six areas of nursing performance (teaching/collaboration, critical care, leadership, planning/evaluation, professional development and IPR/communication). This study has shown that nurse externs are gaining important and essential entry level skills through their summer nurse extern experience.

Nursing education can benefit from this research as faculty develop creative ways to challenge and maximize the student clinical rotations after an externship experience. Clinical experiences for nurse externs could be individualized to challenge the student at their learning level and provide experiences that will assist the students
to specifically develop skills and behaviors that they have not learned from their externship experience. Students who have been externs could be placed in clinical experiences together and challenged in different ways than those who have not had an externship.

This study identified ten nursing behaviors that nurse externs rated lowest in quality score at posttest (See Table 9). These behaviors should be assessed by nursing curriculums to ensure that the remaining semester or year of nursing education provides ample opportunity for the student nurse to be exposed to and develop these nursing behaviors. In the study by McCloskey and McCain (1988) the lowest ranked behaviors were identified by staff nurses who had been in practice for six months. The behaviors from that study were similar to the findings of this study (See Table 11).

When assessing the behaviors identified in this study, it can be assumed that the behaviors will be addressed in a management or second level medical surgical course before the student nurse graduates. However, because staff nurses in practice for six months had identified similar behaviors that they felt unprepared to perform, schools of nursing should evaluate their current curriculum to be sure that not only theory, but clinical opportunities are available to develop these skills. It would be unrealistic to assume that students can be proficient in all these areas by graduation, but if education is committed to providing the
practice setting with the best prepared graduates, these behaviors would be essential to integrate in the curriculum.

The first hypothesis stated that there would be an increase in the overall Six Dimension frequency scores from the beginning to the end of the externship experience. This hypothesis was supported. The total score increase supports findings in the literature that, "by participating in externships/preceptorships students are exposed to many opportunities and practice many nursing behaviors. Exposure to clinical experience increases performance of nursing skills" (Benner, 1979).

The second hypothesis stated that there would be a significant increase in the overall Six-Dimension quality score from the beginning to the end of the externship experience. This hypothesis was supported. The total mean scores were higher from pretest to posttest and analysis by paired t-test was statistically significant. Regardless of the frequency, the students felt they had improved in quality of nursing behaviors in all six sub scales (teaching/collaboration, leadership, planning/evaluation, professional development, critical care and IPR/communication). These findings are consistent with other studies done on students in preceptorship experiences. Jairath, Costello, Wallace & Rudy (1985) found that diploma nursing students had increased scores in all sub scales. This indicates that pre graduate clinical experience was associated with increased evidence of
behaviors consistent with improved nursing performance. The precepted group had increased mean scores in teaching/collaboration and planning/evaluation which are skills which develop through practice interacting with others and learned through the role modeling of the preceptor.

The remaining hypotheses were divided into frequency measures and quality measures for each of the six dimensions of nursing performance. There were five hypotheses that stated that there would be an increase in frequency score in the dimensions of teaching/collaboration (H7), planning/evaluation (H5), critical care (H3), leadership (H9) and IPR/communication (H11) from the beginning to the end of the externship experience. The hypotheses addressing teaching/collaboration (t=2.23, p=.031); leadership (t=2.40, p=.020); planning/evaluation (t=2.27, p=.028) were not supported. The hypotheses addressing the critical care sub scale was supported (t=3.03, p=.004). The sub scale IPR/communication was nearly supported (t=2.56, p=.014).

Peirce (1991) conducted a study on how precepted students viewed their clinical experience. Both first year and second year nursing students were evaluated. The study revealed that the focus of first year students was to learn skills and role parameters. Second year students were more concerned with their own performance and in professionalism. The results of this study indicate that the sub scale critical care included the nursing behaviors most frequently
encountered during the externship experience and supports the findings of Peirce. This data also supports the conceptual framework in that experience is necessary for skill acquisition in order to move from the novice to the advanced beginner level.

There were six hypotheses that stated that there would be an increase in quality score in the six dimensions of teaching/collaboration (H8), leadership (H10), planning/evaluation (H6), IPR/communication (H12), critical care (H4) and professional development (H13) from the beginning to the end of the externship experience. All six of these hypotheses were supported.

The finding of this study support the results of previously reported studies in the literature. Reilly & Oermann (1985) found that by working with a practitioner functioning in the role, students are able to model behaviors and become socialized into the professional nursing role. Clayton, Broome and Ellis (1989) found that nursing students in a preceptored relationship scored higher on all the sub scales except IPR/communication when compared with nursing students who were in a typical faculty/student learning experience. This is not consistent with the results of this study which found that IPR/communication was most significant in quality and frequency after critical care. Considering the amount of change in nursing practice and nursing education that has occurred since then, it is a
positive attribute that students are displaying higher IPR/communication skills.

Dobbs (1984) found that as a result of a preceptorship experience, nursing students felt a significant increase in work-centered role conception. This indicates a change in student self-image and role confidence. The results of this study support this concept in that regardless of frequency, students perceived themselves to have increased in quality in all six dimensions of nursing performance. This means that students have increased confidence and skill in all the nursing behaviors measured.

The highest ranked nursing behaviors extrapolated from the data were: "promotes the patient's right to privacy"; "seeks assistance when necessary"; "communicates a feeling of acceptance and concern for the patients welfare"; "contributes to an atmosphere of mutual trust" and "explains nursing procedures to patients before performing them". These are from the IPR/Communication sub scale. The critical care nursing behavior with the highest ranking was "uses mechanical devices, e.g. suction, Gomco, monitors, ventilators". The final four highest ranked nursing behaviors were from the professional development sub scale and included "accepts responsibility for own actions"; displays a generally positive attitude"; assumes new responsibilities within the limits of capabilities" and "uses learning opportunities for ongoing personal/professional growth". It is apparent based on
these behaviors that the students have developed and practiced the basic principles of nursing. Although the critical care sub scale was the most statistically significant, it is clear that individual behaviors have a different sub scale focus. The aforementioned behaviors speak to the caliber of student in today's schools of nursing and to the effectiveness of nursing curricula on the socialization of students in the areas of communication, interpersonal relations and professional development.

Limitations of the Study

This study used six different hospital based summer nurse extern programs for data collection. There was no control over differences in clinical setting, types of patient experiences or selection of patient care units. All three of these variables would have an effect on the type, frequency and quality of patient care experiences that the nurse extern obtained. Subtle differences in the hospital programs may have affected the nurse extern experience.

Because the institutions selected and matched the preceptor to the nurse extern, there was no control over how the preceptor interacted and influenced the nurse extern. Preceptor philosophy of nursing and educational background would influence the experience for each nurse extern and the nature of the role modeling that occurred.

There was some variation in data collection procedures for both the pretest and posttest. Absence of personal
contact resulted in a lower posttest data collection number. Student self appraisal made scores highly subjective.

Recommendations for Further Research

After completion of the data analysis and comparison of the data with current literature, the researcher has the following recommendations:

1. Replication of the research with larger sample sizes is needed to provide greater empirical support to the very positive impact that nurse extern programs has on student nurse performance.

2. Longitudinal studies need to be done to continue to track student nurses who participated in summer externships to determine if orientation time is shortened as a result of the externship experience.

3. Conduct research to compare outcomes of externships and other types of health care work-related experiences to determine the extent of nursing performance improvement and preparation for the graduate nurse role.

4. Implement educational treatments that specifically provide experience in the identified lowest ranked behaviors to determine if types of clinical experiences can improve these behavior areas.

5. Conduct research with larger and more equal sample sizes that would determine if type of nursing program (i.e. ADN, BSN or diploma) makes a difference in how nursing behaviors are developed.
6. Conduct research that includes evaluation of nursing performance by preceptors as well as nurse externs to decrease the subjectivity in using self-appraisal only.

Conclusion

This study was done to measure the effects of nurse extern programs on student nurse performance. The motivation to complete the study came from personal work experiences with student nurse externs, lack of empirical research in the literature and a desire to validate the importance of nurse externships despite the expense to service institutions.

The study used a pretest-posttest design to collect data at the beginning and at the completion of the summer externship experience. Data collection included frequency scores in five dimensions and quality scores in six dimensions of nursing performance. These areas included: teaching/collaboration, leadership, planning/evaluation, critical care, professional development and IPR/communication. Professional development was measured in quality only. Total mean scores in quality and frequency were also obtained from pretest and posttest.

There were thirteen hypotheses for the study. The first hypothesis stated that there would be a significant increase in total frequency score on the Six Dimensions Scale at the completion of the summer externship experience. This hypothesis was supported and was statistically significant ($t=4.07, p=.000$).
The second hypothesis stated that there would be a significant increase in total quality score on the Six Dimension Scale at the completion of the summer externship experience. This hypothesis was supported and was statistically significant (t=9.29, p=.000).

The remaining hypotheses were stated to reflect frequency and quality scores for the dimensions of nursing performance: teaching/collaboration, leadership, critical care, professional development, planning/evaluation, IPR/communication (professional development was measured in quality only). The only dimension that was statistically significant in frequency score was the dimension of critical care (t=3.03, p=.004). The critical care nursing behavior which students rated themselves highest was "uses mechanical devices: e.g. suction machine, Gomco, cardiac monitor, respirator" (m=3.889). The second highest rated behavior was "perform technical procedures: e.g., oral suctioning, tracheostomy care, intravenous therapy, catheter care, dressing changes (m=3.689). These findings support the findings of Peirce (1991) who found that first year students focused on skills and role parameters. Most of the participants in this study were first year students. All of the six dimensions were statistically significant in quality score (See Table 6).

The findings of the study support the literature in that transition programs like nurse extern programs increase the nursing performance of students. This study
specifically determined that the critical care dimension of nursing performance (statistically significant in both quality and frequency) was the behavior most developed. This dimension measured technical skills, using mechanical devices and nursing interventions. It is clearly evident that the student was most motivated to develop skills at this time. This supports the findings of Peirce (1991) which stated that first year students were most motivated to learn skills and role parameters.

Interpersonal relations/communication was a dimension that was statistically significant in quality score and nearly significant in frequency score. This dimension measured aspects of interaction and communication with patients, families and members of the health care team. These behaviors are best developed, according to the literature, through role modeling and exposure to situations in which these behaviors are exercised. Nurse extern programs which allow a student nurse to work in a one-on-one relationship with a practicing nurse in an acute care setting gave ample opportunity for the nurse extern to observe and develop these behaviors.

Quality scores increased and were statistically significant in all six dimensions. Confidence in all areas of nursing performance was attained regardless of the perceived frequency of the behaviors. Confidence as well as development of nursing behaviors is integral to moving from the novice to the advanced beginner level of practice.
Appendix A

To Whom It May Concern:

Lola Trudell Coke, BSN, RN has my permission to use the Six Dimension Scale of Nursing Performance (6-D Scale) in his/her research/evaluation study, Effects of Nurse Externships on Nursing Performance.

It is understood that, should the investigator use a form other than the standard form, the NURSING RESEARCH citation for the original 6-D Scale will appear as part of the modified form.

Patricia M. Schwirian, Ph.D., R.N.
Professor
The Ohio State University College of Nursing
1585 Neil Avenue
Columbus, OH 43210

PMS/8/26/91 File:6dform
Appendix B

EFFECT OF NURSE EXTERN PROGRAMS ON NURSING PERFORMANCE

Part I. The questions in Part I of the survey pertain to you and your nursing experience.

Demographic Data: Check the appropriate boxes.

<table>
<thead>
<tr>
<th>AGE</th>
<th>GENDER</th>
<th>MARITAL STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-21</td>
<td>Male</td>
<td>Married</td>
</tr>
<tr>
<td>22-25</td>
<td>Female</td>
<td>Single</td>
</tr>
<tr>
<td>26-29</td>
<td></td>
<td>Divorced</td>
</tr>
<tr>
<td>30-33</td>
<td></td>
<td>Separated</td>
</tr>
</tbody>
</table>

Type of Nursing program you attend:

BSN____ ADN____ Diploma____

Indicate month and year you anticipate graduating: ________.

List the nursing courses you have taken:

Course Title

---------------------------------------------------------------
---------------------------------------------------------------
---------------------------------------------------------------
---------------------------------------------------------------
---------------------------------------------------------------
---------------------------------------------------------------

67
What is the amount of nursing related experience you had before you entered the nursing program?

_____ (1) None
_____ (2) Less than one year
_____ (3) One or two years
_____ (4) Three or four years
_____ (5) Five or more years

What amount of time have you been working in nursing related experiences while in your nursing program?

_____ (1) None
_____ (2) Part-time employment during the school year
_____ (3) Full-time employment during the school year
_____ (4) Part-time summer employment
_____ (5) Full-time summer employment
_____ (6) Full-time summer employment and part-time during the school year

Summarize your nursing related experiences below. Please indicate either before or during your nursing education program:

<table>
<thead>
<tr>
<th>Before</th>
<th>During</th>
<th>Type of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>_____</td>
<td>Nurse’s Aide</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
<td>Unit Secretary</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
<td>Home Health Aide</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
<td>Hospital Volunteer</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
<td>Summer Extern Program</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
<td>Other</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
<td>None</td>
</tr>
</tbody>
</table>
Part II. The questions in this part of the survey pertain to your Nurse Extern Program.

Are you employed in the Nurse Extern Program:
Full-time _______ Part-time _______

Number of hours worked per week if part-time: ________

Number of hours you spend under direct supervision of your preceptor per week: ________

Do you work on more than one unit as part of your Nurse Extern Program:
Yes _______ No _______
**SIX DIMENSION SCALE OF NURSING PERFORMANCE**

Instructions: The following is a list of activities in which student nurses may engage with varying degrees of frequency and skill.

1. In Column A, please enter the number that best describes how often you have performed the following activities in nursing related experience.

2. In Column B, for those activities that you have performed, enter the number that best describes how well you feel you perform them.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Not expected to perform</td>
<td>1-Not Very Well</td>
</tr>
<tr>
<td>2-Never or seldom</td>
<td>2-Satisfactorily</td>
</tr>
<tr>
<td>3-Occasionally</td>
<td>3-Well</td>
</tr>
<tr>
<td>4-Frequently</td>
<td>4-Very Well</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teach a patient's family members about the patient's needs.</td>
<td>_____</td>
</tr>
<tr>
<td>2. Coordinate the plan of nursing with the medical plan of care.</td>
<td>_____</td>
</tr>
<tr>
<td>3. Give praise and recognition for achievement to those under his/her direction.</td>
<td>_____</td>
</tr>
<tr>
<td>4. Teach preventive health measures to patients and families.</td>
<td>_____</td>
</tr>
<tr>
<td>5. Identify and use community resources in developing a plan of care for a patient and family.</td>
<td>_____</td>
</tr>
<tr>
<td>6. Identify and include in nursing care plans anticipated changes in patient's conditions.</td>
<td>_____</td>
</tr>
<tr>
<td>7. Evaluate results of nursing care</td>
<td>_____</td>
</tr>
</tbody>
</table>
8. Promote the inclusion of patient's decision and desires concerning his/her care.

9. Develop a plan of nursing care for a patient.

10. Initiate planning and evaluation of nursing care with others.

11. Perform technical procedures: e.g. oral suctioning, trach care, catheter care, dressing changes.

12. Adapt teaching methods and materials to the understanding of the audience.

13. Identify and include immediate patient needs in the plan of care.

14. Develop innovative methods and materials for teaching patients.

15. Communicate a feeling of acceptance of each patient and a concern for the patient's welfare.

16. Seek assistance when necessary.

17. Help a patient communicate with others.

18. Use mechanical devices: e.g., suction machine, thermometer.

19. Give emotional support to family.

20. Verbally communicate facts, ideas, and feelings to other health team members.

21. Promote the patient's right to privacy.

22. Contribute to an atmosphere of mutual trust, acceptance and respect among other health team members.
23. Delegate responsibility for care based on assessment of priorities of nursing care needs.

24. Explain nursing procedures to a patient prior to performing them.

25. Guide other health team members in planning for nursing care.

26. Accept responsibility for the level of care under his/her direction.

27. Perform appropriate measures in emergency situations.

28. Promote the use of interdisciplinary resource persons.

29. Use teaching aids and resource materials in teaching patients and their families.

30. Perform nursing care required by critically ill patients.

31. Encourage the family to participate in the care of the patient.

32. Identify and use resources within the health care agency.

33. Use nursing procedures as opportunities for interaction with patients.

34. Contribute to productive working relationships with other health team members.

35. Help a patient meet his/her emotional needs.

36. Contribute to a plan of care for a patient.

37. Recognize and meet the emotional needs of a dying patient.
38. Communicate facts, ideas, and professional opinions in writing to patients and families.

39. Plan for the integration of patient needs with family needs.

40. Remain open to the suggestions of those under his/her direction.

41. Function calmly and competently in emergency situations.

42. Use opportunities for patient teaching when they arise.

Rate the following behaviors in terms of quality only—i.e., Column B.

43. Use learning opportunities for ongoing personal and professional growth.

44. Display self-direction.

45. Accept responsibility for own actions.

46. Assume new responsibilities within the limits of capabilities.

47. Maintain high standards of performance.


49. Display a generally positive attitude.

50. Demonstrate a knowledge of the legal boundaries of nursing.

51. Demonstrate knowledge in the ethics of nursing.

52. Accept and use constructive criticism.
May 20, 1992

Lola A. Coke  
6276 Bechalla SE  
Grand Rapids, MI 49546

Dear Lola:

The Human Research Review Committee of Grand Valley State University is charged to examine proposals with respect to protection of human subjects.

Your proposed project entitled "Effect of Nurse Extern Programs on Nursing Performance" has been reviewed. It has been approved as a study which is exempt from the regulations by section 46.101 of the Federal Register 46(161):8336, January 26, 1981.

Your proposal project is described under section 46.101 sub section (b). As a survey with voluntary participation, no perceived risk to the human subject, and one in which anonymity is assured, I am satisfied that you have complied with the intent of the regulation published in the Federal Register 46 (161:8336, January 26, 1981).

Sincerely,

[Redacted]  
Paul Huizenga, Chair  
Human Research Review Committee
APPENDIX D
May 1, 1992

Lola Coke
1676 Bechalla SE
Grand Rapids, MI 49546

Dear Lola:

As co-chairpersons of the Nursing Research Committee at Blodgett Memorial Medical Center, we are pleased to inform you that your research study entitled "Effects of Nurse Externships on Student Role Performance" has been approved by our committee.

Pending your approval from GVSU Human Subjects Committee, you may begin your data collection during the weeks of May 4 and May 26. We understand that you will be doing the post-test data collection later in the summer. We request that you submit a brief report of your findings to the Nursing Research Committee and to Kathy Klock upon completion of your project.

Best wishes in conducting your study. If we can be of any additional assistance as you proceed, please feel free to contact us.

Sincerely,

Carol Gates MSN, RN, CCRN
Denise Busman MSN, RN, CCRN

3525/BC
June 23, 1992

Lola Coke, BSN, RN
Grand Valley State University
Allendale, MI 49401-9403

Dear Lola,

The Nursing Research Review Committee is pleased to approve the conduct of your research at Borgess Medical Center.

Enclosed are the checklists completed in the review process. Proposals are evaluated on the stated criteria. Any handwritten comments are offered as suggestions for your consideration.

If you have any questions, please feel free to call (616) 383-8321.

Sincerely,

Michele S. Heckman, MSN, RN, CDE
Clinical Nurse Specialist
June 17, 1992

Lola Coke, BSN, RN
6276 Bechalla
Grand Rapids, MI 49546

Dear Ms. Coke:

I am pleased to inform you that on June 16, 1992, upon recommendation of the Institutional Review Committee, the Hospital Board gave approval for you to conduct the research project which involves nurse interns who will be working at our hospital this summer.

You will be asked to attend an Institutional Review Committee Meeting to give a report on the results of your research project. This can be anytime after the completion of your study but no later than June 1993. In addition, any changes in the study tool must be addressed immediately to me.

Thank you for your patience during the processing of this request, and I wish you much success in conducting this research project. I look forward to reviewing the results of your study. If I can be of any help, please call me at 394-3207.

Sincerely,

Reezie DeVet, RN
Vice President - Patient Operations and CNO

cp

pc Judy Javorek
June 5, 1992

Lola A. Coke, BSN, RN
6276 Bechalla Dr. S.E.
Cascade Twp, MI 49546

Dear Ms. Coke,

I am pleased to grant approval for your research study "Effects of Nurse Externships on Nursing Performance". You are scheduled to address the Student Nurse Technicians during their orientation program on June 8.

If you have any questions or need assistance, please call me at 247-7140.

Sincerely,

Mary Mitus, RN, MSN
Director of Nursing Education and Planning
May 29, 1992

Lola Coke, RN, BSN
6276 Bechaila SE
Grand Rapids, Michigan 49546

Dear Lola:

Thank you for sending your abstract and research documents related to your research of the effect of externships on performance. I am most interested in your topic and results.

You are, therefore, given permission to conduct your research at Saint Mary's Health Services (SMHS) during the summer months of 1992. Your subjects are described in this facility as "Student Practitioners". As we discussed on the phone, you may meet with the group of six student practitioners during their orientation the week of June 8, 1992. Please contact the program coordinator, Linda Helmholdt, at 774-6483 to set appointment times. I will share your abstract with Linda as she will be your contact person throughout the summer.

I understand your research will protect the privacy of SMHS and the students involved, and that you will provide us with a copy of your results and completed thesis.

Good luck on your project. I am eager to learn of your results.

Sincerely,

Karen Dunlap
Nursing Education and Special Projects Coordinator

pc: Beth Jackson
Vice President - Nursing

Linda Helmholdt
Nurse Educator
Appendix E

Script

You are being asked to participate in a research study designed to determine the effect of a nurse externship program on nursing performance of student nurses. You will be asked to complete a survey tool at the beginning and at the end of your externship experience. Your participation in this study is voluntary. The return of a completed tool indicates your decision to voluntarily participate in this study. If you choose not to participate in the research study, just return your blank survey tool in the provided envelope. Whether you choose to complete the survey tool or not, your decision will not affect your participation in the nurse extern program. It will take approximately 20 minutes to complete the survey. When you have completed the survey please place it in the envelope labeled Nurse Extern Survey and place it in the designated box.
Appendix F

CONSENT FORM

Dear Nursing Student:

My name is Lola Coke, BSN, RN and I am a graduate student at Grand Valley State University. As a requirement for my masters degree, I need to conduct a research project. My research project involves determining the effects of nurse extern programs on the nursing performance of student nurses.

I would like you to participate in my study. You will be asked to complete a survey tool at the beginning and at the completion of your externship experience. The results of the study will be available to you at the completion of the study if you desire. My phone number is (616) 942-7868 if you have any questions or concerns about participating in the study.

Please read the following statements and sign your name below if you are willing to participate in the study.

I understand that if I agree to participate I will read and rate responses on a survey tool and complete some general information about the extern program and my personal experiences.

I further understand that:

1. The survey will take approximately 20 minutes to complete.
2. All information is confidential and will be reported as group information only.
3. My identity and my school will not be revealed.
4. My participation is voluntary.
5. The return of a completed survey indicates my decision to voluntarily participate in this research.
6. My decision to participate will not be known to others and will not affect my participation in the nurse extern program.

Name ____________________ Date____________

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Appendix G

Dear Nursing Student:

My name is Lola Coke, BSN, RN and I am a graduate student at Grand Valley State University. Earlier this summer you completed a data collection tool for me. The data collection tool will be used to measure the effects the nurse extern program you are working in will have on your nursing performance.

As you may recall, my study included surveying you at the beginning and at the end of your externship experience. You consented to complete a post experience survey when you signed the consent form earlier this summer.

The purpose of this letter is to provide you a copy of the data collection tool to fill out when you have completed your summer externship experience. This means completing the survey tool before you begin your fall semester of school. I am only looking at the summer extern experience. My goal is to have you complete the attached survey and return it to me by August 31st.

Please return the attached data collection tool by August 31st to me in the stamped self-addressed envelope.

If you wish a copy of the completed study, please send your name and address to me in the envelope and I will forward a copy of my results to you in January of 1993.

Thank you for participating in my masters research!!
LIST OF REFERENCES
LIST OF REFERENCES


