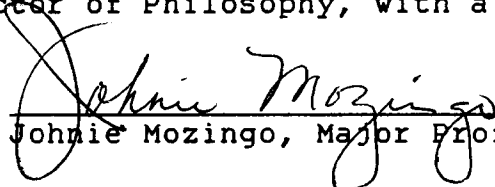
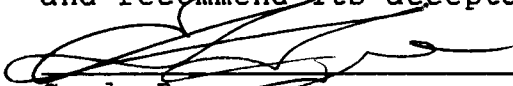


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I am submitting herewith a dissertation written by Angela F. Wood entitled "An Investigation of Stimuli Related to Baccalaureate Nursing Students' Transition Toward Role Mastery." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

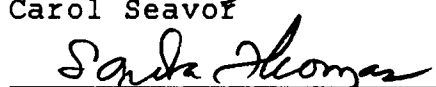

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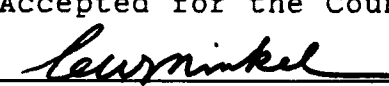

Grady Bogue


Don Dessart


Carol Seavor


Sandra Thomas

Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

Role Mastery

AN INVESTIGATION OF STIMULI RELATED TO
BACCALAUREATE NURSING STUDENTS' TRANSITION
TOWARD ROLE MASTERY

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Angela F. Wood
May, 1998

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DEDICATION

This thesis is dedicated to the memory of

Myrtle Wilkerson

who set me on a life-long path of learning.

ACKNOWLEDGMENTS

I am thankful to many people for their contribution to my success in graduate education. The University of Tennessee Graduate faculty has consistently encouraged and challenged me to grow intellectually. I am particularly grateful to my Dissertation Committee, committee chair Johnie Mozingo, whose high standard for Baccalaureate Nursing education has served as a model for my own practice; Sandra Thomas, who taught me the art of critical thinking; Carol Seavor, whose cheerful encouragement has sustained me through this long process; Grady Bogue, who embodies the phrase "integrity tempered by compassion;" and Don Dessart, the best math teacher to ever pick up a piece of chalk. The quality of this manuscript is due in no small part to their generous gift to me of time, energy, and ability.

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Abstract

As the changing health care system moves increasing numbers of nurses into independent roles in various settings including the community, nurses' ability to evaluate their own performance has become an expectation for demonstration of role mastery. Using the Roy Adaptation Model as a framework, this study investigated factors related to the baccalaureate nursing student's transition to role mastery as measured by the congruency between student's self evaluation of clinical performance and the clinical instructor's evaluation of the student. A descriptive, prospective, cross-sectional design including a triangulation of quantitative and qualitative methodologies was utilized. Student self-esteem, level in nursing school, student age, student perceived health, and student performance of secondary roles were not found to be significantly correlated to congruency between student self-evaluation and instructor evaluation of students. However, in a comparison of the subscales to each other, there was a significantly higher level of congruence between student self evaluation and instructor evaluation in the areas of

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interpersonal communication, professional development, and planning while their was a significantly lower level of agreement in the areas of critical care skills and leadership. Qualitative data revealed that nursing faculty frequently serve as role models for nursing students and that optimal student-teacher relationships were described as facilitating, nonjudgmental/communicative, mentoring, and evaluative. Student-teacher relationships that were described as judgmental, intimidating, and noncommunicative were perceived negatively by students. Factors that students reported as having helped their progress in nursing school included constructive criticism from instructors and being treated with respect by the instructor, clinical experiences that clarified classroom theory, personal attitudes and abilities, and support of family and friends. Factors that students felt had hindered their progress included disorganized and highly critical instructors, limited clinical experience, amount of work for time available, other secondary roles, personal limitations, unclear expectations, and testing.

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Chapter One

Introduction

As the changing health care system moves increasing numbers of nurses into independent roles in various settings including the community (Strader, 1995), nurses' ability to evaluate their own performance has become an expectation for demonstration of role mastery (Cox, 1987; Hawks & Hromek, 1992; Leino-Kilpi, 1992). Self-evaluation is a learned skill and one that student nurses must master if they are to make a successful transition to the role of professional nurse.

The nursing theorist Sr. Callista Roy (1991, p. 369) addresses the concept of role transition. She states that effective role transition requires that one must:

exhibit adaptive expressive behaviors and a few adaptive instrumental behaviors that partially meet with the social expectations associated with the assigned role. However, the number or quality of the behaviors is not sufficient to formulate a diagnosis of role mastery. The adaptive behaviors

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indicate positive movement toward the goal of role mastery.

Studies investigating self-evaluation accuracy among students enrolled in various health professions have had mixed findings. Cochran and Spears (1980) found that grade point average was positively correlated with accuracy of students' self-perception while Stuart, Goldstein and Snope (1980) found that discernable evaluation criteria such as chart review, communication skills, vocabulary, and knowledge of various aspects of treatment positively correlated with increased accuracy in student self-evaluation, as measured by agreement between student self-evaluation and instructor evaluation of clinical skills. Some researchers found progress through a program of study to be correlated with increased agreement between student self-evaluation and instructor evaluation (Calhoun, Haken & Woolliscroft 1990; Cochran & Spears, 1980), while other investigators (Arnold, Willoughby & Calkins, 1985) found that the difference in student self-evaluation and instructor evaluation increased as the students progressed toward graduation. Arnold, Willoughby and Calkins attributed this increase to

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professional development. Psychological problems, especially depression, were found to decrease agreement between fourth year medical students' self-evaluation and instructor evaluation (Morton & Macbeth, 1977).

Studies clearly demonstrate the value of self-evaluation for students enrolled in nursing programs (Cox, 1987; Hawks & Hromek, 1992). Because accurate self-evaluation is necessary for recognition of abilities, identification of areas in need of improvement, and awareness of limitations in safe practice, it is an important component in role transition leading to role mastery by the professional nurse (Leino-Kilpi, 1992).

The educational process provides an appropriate environment for learning self-evaluation skills (Hawks & Hromek, 1992). In 1986, the American Association of Colleges of Nursing recommended that colleges of nursing develop strategies for fostering the development of student self-evaluation abilities. One of the goals of nurse educators is to facilitate role transition of nursing students so that they will be able to practice safely and independently, demonstrating role mastery in a variety of settings

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with varying levels of supervision. As students learn to accurately evaluate their own clinical performance, they are empowered to take responsibility for their own learning. Leino-Kilpi (1992,)), points out that self-evaluation "contributes to independence... a long-term goal" (p. 425). The experiences of Hawks and Hromek (1992) demonstrate that, when given the opportunity, students frequently point out their own errors and formulate a plan for avoidance of future mistakes. The process of learning to accurately evaluate one's own clinical performance results in enhancement of many behaviors necessary for role mastery. The outcome of accurate self-evaluation is a nurse who can effectively examine the effectiveness of his or her own transition toward role mastery.

Within the discipline of nursing, several studies have been conducted related to clinical performance and evaluation. In 1979, Schwirian and associates found that nursing students consistently judged themselves to be less competent than did the faculty. Other studies have investigated the relationship of self-concept, clinical performance and a variety of demographic variables and the effects on clinical performance of a nursing internship/preceptorship (Burgess, 1980).

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Mozingo, Thomas and Brooks (1995), studied perceived competency among undergraduate nursing students. They found that increased exposure to clinical activities resulted in increased perception of competency while increased anxiety resulted in decreased feelings of competency. No studies were found that investigated the factors that affect the ability of nursing students to accurately evaluate their own clinical performance. Without knowledge related to the factors that may affect the accuracy of self-evaluation, it is difficult if not impossible for nursing faculty to assist students in improving their self-evaluation abilities.

In summary, self-evaluation is necessary for mastery of the professional nurse role (Cox, 1987). Accurate self-evaluation among nursing students has been demonstrated to increase a variety of behaviors that indicate role mastery including self-reflection (Leino-Kilpi, 1991), independence (Bondy, 1983; Fuhrman & Weissburg, 1978; Malek 1988; & Pavish 1987), self-direction , self-motivation, and analytic thinking (Fuhrman & Weissburg). If factors that affect nursing students' ability to evaluate themselves were identified, it is possible that nursing faculty could implement interventions that would enhance accuracy of

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student self-evaluation, and thus, improve student progress toward role mastery.

The Problem

While many investigators have studied the value of self-evaluation in the education of professional health care providers and role transition in nursing, no studies were found that investigated the factors that affect baccalaureate students' ability to evaluate their own progress toward role mastery.

Purpose

The purpose of this study was to investigate stimuli related to the baccalaureate nursing student's transition to role mastery as measured by the congruency between the student's self evaluation of clinical performance and the clinical instructor's evaluation of the student. This investigation was developed using the Roy Adaptation Model as a framework.

Theoretical Framework

In the Roy Adaptation Model, the person is seen as an adaptive system in constant interaction with an environment of focal (those most "immediately confronting the person"), contextual ("all stimuli present in the situation that contribute to the effect

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of the focal stimulus"), and residual stimuli ("factors within or without the person whose effects in the current situation are unclear") (Roy, 1991). According to the Roy Model, the person is able to adapt to the changing environment through coping mechanisms identified as the regulator and cognator subsystems. Regulator and cognator activity are demonstrated through physiological, self-concept, interdependence, and role transition adaptive modes (Andrews & Roy, 1986).

The goal of nursing in the Roy Adaptation Model is to "enhance the interaction of the person within the environment - to promote adaptation" and so promote "health of individuals and society" (Andrews & Roy, p. 51, 1986). This goal is achieved through assessment of the person and stimuli in his or her environment, interpretation of the data, setting of a mutual goal with the person, intervening, and evaluating the outcome (Andrews & Roy, 1986).

Physiologic adaptation is accomplished through the physiological mode. The overriding goal of this mode is physiological integrity (Roy & Andrews, 1991). The mode is comprised of five basic needs (oxygenation, nutrition, elimination, activity and rest, and

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protection) and four complex processes (senses, fluids and electrolytes, neurological function, and endocrine function). When assessing function of the physiologic mode, each basic need and complex process is reviewed to reveal the "adaptive status of the person" (Roy & Andrews, 1991, p. 61). After assessment of internal and external stimuli, the nursing process is implemented to facilitate physiologic integrity.

Self concept is the second adaptive mode within the Roy Adaptation Model. The self concept mode, is a "composite of beliefs and feelings that one holds about oneself at a given time [and] is formed from internal perceptions and perceptions of others' reactions" (Roy & Andrews, 1991, p. 270).

The self concept mode is divided into two subareas: physical self which encompasses body sensation and body image; and personal self consisting of self-consistency, self-ideal, and moral-ethical-spiritual self. The overall goal of the self concept mode is psychic integrity which is reflected in "one's level of self-esteem ... and related behaviors" (Roy & Andrews, 1991, p. 272).

The third adaptive mode described by Roy is interdependence. This mode, which is concerned with

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the close relationships of people, has as an overriding goal affectional adequacy or the "feeling of security in nurturing relationships" (Roy & Andrews, 1991, 386). Affectional adequacy "incorporates the need to be nurtured and to nurture" as well as "the need for care, attention, affirmation, belonging, approval, and understanding" (Roy & Andrews, 1991, p. 387).

The last adaptive mode, role function, was investigated in this study. Role function relates to "the role the person occupies in society" (Andrews & Roy, p. 136, 1986). Roles are categorized as primary, secondary, or tertiary. Primary roles such as age, sex, and development determine "the majority of behaviors engaged in by the person during a particular period of life" (Andrews & Roy, p. 136, 1986). Secondary roles, which are usually long lasting, are roles that a person takes on such as family position and/or occupation. Unlike secondary roles, tertiary roles are usually temporary. They are generally role-associated positions which are chosen to fulfill an obligation brought on by either a primary or secondary role (Andrews & Roy, 1986). An example of a tertiary role would be the role of Red Cross volunteer taken on

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association with the secondary role of Registered Nurse.

Role mastery is the goal of the role function mode. It is a demonstration by the client of both instrumental and expressive behaviors that meet societal expectations associated with the role. Role mastery is the result of effective adaptation within the role function mode. Generally, a period of role transition occurs as the client progresses toward role mastery. During role transition, the client demonstrates some, but not all, of the expressive and instrumental behaviors consistent with role mastery (Nuwayhid, 1984).

Progress toward role mastery is demonstrated through instrumental behaviors which are directed at meeting societal expectations and expressive behaviors which gain feedback for the person. Within each of these behaviors are four partitions or categories (consumer, reward, access to facilities/set of circumstances, and cooperation/collaboration) that "constitute major stimuli for role behavior" (Andrews & Roy, 1986, p. 139). Additional stimuli that may impact role performance include social norms, physical makeup

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and chronological age, self-concept, role models, knowledge of expected behaviors, physical and/or emotional well-being, and performance in other roles (Roy & Andrews, 1991, p. 354).

When a person chooses to take on the secondary role of nursing student many behaviors, including self evaluation, must be accomplished to achieve role mastery. Any or all of the above mentioned stimuli may impact role transition and, ultimately, role mastery. The goal of the nursing instructor (nurse) is to assist students (clients) in adapting to their new role, student. By investigating stimuli that may diminish adaptation to the nursing role, the student and instructor may be able to develop a plan of intervention that will assist the student in progressing through role transition to role mastery.

The Roy Adaptation Model emphasizes the importance of assessment of a wide range of stimuli in facilitation of client adaptation to those stimuli. In the role function mode, both instrumental and expressive stimuli must be considered when assessing stimuli for effective role function by the student.

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Nuwayhid (1984), defines instrumental stimuli associated with the consumer as the recipient of benefit from role mastery. When considering the role of nursing student, the students themselves are the main recipients of benefit. Consumer expressive stimuli consists of an "appropriate and receptive person to relate to for immediate feedback." Clients, friends, family and/or faculty members serve as consumers for the nursing student.

The instrumental reward of role mastery is described by Nuwayhid as the compensation or benefit the individual receives for performance of role behaviors. For nursing students, progression in their course of study and, eventually, graduation and employment as Registered Nurses are the primary rewards of role mastery. The expressive reward consists of the social support network that "provides feedback on role performance." Stimuli comprising this component for the student nurse may include peers, faculty and even clients who are cared for by the student.

The third component of instrumental and expressive stimuli is access to facilities/set of circumstances.

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Instrumental stimuli in this component include the "materials or tools to perform role behaviors (Roy, 1991, p. 351). These materials/tools encompass a wide variety of stimuli for the nursing student including, but certainly not limited to, library access, evaluation criteria, financial resources, and transportation. Expressive stimuli in this component provide assurance that one has what is needed to meet the demands of the role. For the nursing student, expressive stimuli would consist of the presence of an attentive support system, including peers and faculty members who are available to help with concerns and problems.

In the last component, cooperation/collaboration, instrumental stimuli relate to the provision of adequate time for demonstration of role behaviors. For the nursing student, this might include the time necessary for mastering theoretical concepts as well as psychomotor skills required for role mastery. The expressive stimuli of this component consist of an "emotional tone and belief that the setting in which the role is performed provides the circumstances needed

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to fulfill the role" (Roy, 1991, 351). The attitude and actions of peers and faculty members could definitely be considered as important stimuli in this component. Stimuli chosen for investigation in this study are as follows:

1. student self-esteem
2. time (midterm to end of the semester)
3. level attained in nursing education
4. area of clinical skill being evaluated
5. student age
6. student's perceived health
7. performance of other secondary roles such as parent, spouse, employee, etc.

Quantitative Questions

The overall objective of the study was to identify stimuli related to transition of baccalaureate nursing students to role mastery as measured by the congruency between the student's self evaluation of clinical performance and the clinical instructor's evaluation of the student. Research questions were identified as follows:

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Primary Questions:

1. What is the relationship between student perceived self-esteem and congruency between student and faculty evaluation of student clinical performance?
2. Does student versus faculty evaluation congruency differ from midterm to end of the semester?
3. Does student versus faculty evaluation congruency differ between junior and senior students?
4. Does congruency between student and faculty evaluation vary depending upon the clinical ability being evaluated, i.e. leadership, critical care, teaching/collaboration, planing/evaluation, interpersonal relations and communication, and professional development?

Secondary Questions:

1. What is the relationship between student chronologic age and congruency between student and faculty evaluation of student clinical performance?
2. What is the relationship between student perception of personal health and congruency between student and faculty evaluation of student clinical performance?
3. What is the relationship between performance of

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other secondary roles and congruency between student and faculty evaluation of student clinical performance?

Qualitative Questions

This study included a qualitative as well as a quantitative component. Qualitative research involves "the systematic collection and analysis of subjective narrative materials, using procedures in which there tends to be a minimum of researcher-imposed control" (Polit & Hungler, 1995, p. 15). Emphasizing "the dynamic, holistic, and individual aspects of the human experience" (Polit & Hungler, 1995, p. 16), qualitative research generally follows inductive reasoning, attempts to examine reality as it is experienced by each participant, and generally analyzes narrative information (Polit & Hungler, 1995).

While much of the knowledge needed for development of nursing science can be discovered by quantitative methods, some of that knowledge is more appropriately sought through the qualitative method or a triangulation of quantitative and qualitative methods. Methodological triangulation can provide "a more complete understanding of the phenomenon under study (Polit & Hungler, 1995).

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Because the investigation of stimuli that affect role mastery in nursing students is fairly new, this study utilized methodological triangulation combining quantitative measures with qualitative content analysis of written answers to open-ended questions. This combination of approaches enhances what is known by attempting to verify theory and extend areas that have yet to be investigated (Bergum, 1987).

At the end of the semester of data collection, students were asked four open-ended, narrative questions in an attempt to capture their perception of key stimuli that may affect role mastery. The questions were as follows:

1. Describe your relationship with your clinical instructor(s) for this course.

Rationale: "Teachers provide the environment, proper tools and resources that enable students to contribute at higher level of functioning that include increasing responsibility and autonomous decision making as well as feelings of self-worth" (Hawks & Hromek, 1992). Therefore, perception of the instructor is a measure of instrumental access to facilities/set

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of circumstances stimuli (Roy & Andrews, 1992). This variable may also indicate expressive access to facilities/set of circumstances stimuli and collaboration/cooperation stimuli (Roy & Andrews, 1992).

2. What factors helped or hindered your progress in this course?

Rationale: These responses reflect the student's perception of instrumental and expressive access to facilities/set of circumstances stimuli (Roy & Andrews, 1992).

3. In the clinical area, what do you think were the main things on which you were evaluated?

Rationale: This variable reflects knowledge of expected behaviors for role performance (Roy & Andrews, 1992).

4. If anything unusual has happened to you during this semester, please describe.

Rationale: This variable will reflect any event that has occurred that was not addressed specifically by the instruments completed by the students, but that the student perceived as significant.

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Theoretical and Operational Definitions

For the purposes of this study, the following definitions were utilized:

1. age - chronologic age of the student in years
2. self-concept- "the composite of beliefs and feelings that a person holds about him or herself at any given time" (Roy & Andrews, 1991, p. 16). One aspect of self-concept is self-esteem. For purposes of this study, measurements of self-esteem will be used to reflect student self-concept. Self-esteem will be measured with the Self-Anchoring Self Esteem Scale (Appendix A) and Rosenberg Self-Esteem Scale (Appendix B).
3. level in nursing education - level of nursing courses in which the student is currently enrolled, junior or senior.
4. area of clinical skill - different categories of clinical skills required for role mastery. For the purposes of this study, the scores on the subscales of the Six-Dimension Scale of Nursing Performance (SDS) which are leadership, critical care,

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teaching/collaboration, planning/evaluation, communication, and professional development (Appendix C).

5. perceived health - the students perception of their physical state. For the purposes of this study, the student score on the Self-Anchoring Striving Scale (Cantril, 1963) (Appendix D).

6. secondary role - "Role that a person assumes to complete the tasks associated with a developmental stage and primary role" (Roy & Andrews, 1992, p. 349). For the purposes of this study, students were asked to indicate, from a list, which other secondary roles they were currently fulfilling. The list included "other" so they could identify any other role that was not listed.

7. congruency score- A numerical absolute value score that indicates the degree of similarity between the perceptions of the student and the perceptions of the instructor regarding student clinical performance. For the purposes of this study, the score was calculated by finding the absolute numerical difference between the SDS score assigned to the student by the instructor and

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the SDS score that the student assigned during self-evaluation. A score of zero indicates complete agreement between student and faculty.

8. clinical skills- abilities that are required to plan, implement, and evaluate safe, effective nursing care as measured by the SDS clinical assessment tool.

15. evaluation- A judgement of the effectiveness of intervention in relation to the person's behavior (Roy & Andrews, 1991, p. 46), measured by the score assigned on the SDS clinical assessment tool with regard to the student's performance in the clinical area.

16. nurse - The instructor responsible for clinical evaluation of the student.

17. client - "An adaptive system, a whole comprised of parts that function as a unit for some purpose" (Roy & Andrews, 1991, p. 4). For the purposes of this study, junior and senior BSN students.

18. role transition- The process of assuming and developing a new role. In this study, movement through the nursing student role to mastery of the professional nurse role.

19. role mastery - demonstration by the client of both instrumental and expressive behaviors that meet

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societal expectations associated with the role. Role mastery is the result of effective adaptation within the role function mode. Mastery of the role of Registered Nurse requires demonstration of many behaviors. One of those behaviors, self-evaluation, was studied in this project.

20. progress toward role mastery - effective adaptation within the role function mode, as demonstrated through instrumental behaviors which are directed at meeting societal expectations and expressive behaviors which gain feedback for the person.

21. self-evaluation- Judgement of one's own performance, measured by the SDS clinical evaluation tool when completed by the student.

Theoretical and Methodological Problems

This study was predicated on the assumption that instructors have the expertise to evaluate student clinical performance. This assumption is widely held in nursing education programs. Historically, student clinical performance has been evaluated by nursing instructors. An advocate of student self-evaluation, Marriner (1974), supports the role of the instructor as

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"validator" of student perceptions. Benner (1982) supports the idea that instructors, because of their status as experts, are able to make judgments regarding student performance. Cox (1987), describes a student-centered nursing course taught at Coventry Polytechnic Institute that uses a combination of faculty, peer, and self-evaluation. However, he states that when there is a dispute concerning the grade, the instructor's evaluation determines the final grade even though this is "an authoritarian approach in a student-centered course" (p. 64). Even though many writers express the opinion that "instructors, by virtue of their role as teachers, have the right to make professional judgments about the performance of students" (Pollok, Poteet, & Whelan, 1983, p.33), there are concerns related to evaluation of students by instructors.

As early as 1959, Palmer expressed concerns about the influence of faculty bias, subjectivity, and variable instructor experience on the accuracy of student evaluation. Hayter (1973) found that when nursing instructors rated a student's videotaped performance, their agreement level was only 44%. When rating the videotaped performance of medical residents,

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Stuart, Goldstein and Snope (1980) found that instructors tended to be inconsistent, "at one time rating an item low, and then after observing several residents exhibit the same flaws, tending..." to give a rating of "adequate" (p. 642). They also admitted that the scores assigned at times reflected the level of performance that they knew the student was capable of and that they tended to rate first year residents higher than their performance warranted.

It is generally assumed that student evaluation by the instructor is based on the criteria accepted to demonstrate mastery of the nursing role. However, the poor reliability of instructor evaluation of students in the clinical area has been demonstrated (Orchard, 1992). Thus, it is possible that instructor evaluation of students may not be a valid measure to use for determining the students' ability to evaluate themselves and, therefore, not a valid measure of progress toward role transition. While essentially all nursing schools utilize instructors for clinical evaluation, this is an area that needs further investigation in the future.

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Limitations and Delimitations

Limited faculty time with students in the clinical area could have increased the incongruence between student and faculty evaluations. The fact that some instructors had supervised students in the clinical setting for only a few days may have limited the ability of the instructor to provide a comprehensive assessment of the student, resulting in higher student self-evaluation scores than faculty assigned scores on the SDS.

Even though the sample includes all students who were both eligible and willing to participate, the small number of students and instructors from only two colleges of nursing results in a decreased generalizability of the findings. Inaccuracy and bias that may be inherent to the evaluation process may also hinder the reliability of findings.

Significance of the Study

Early recognition of stimuli that affect the ability of nursing students to accurately evaluate themselves could provide an opportunity for improvement of student self-evaluation accuracy throughout the

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student's course of nursing education. There are three main areas of significance of this study. It was hoped that the findings of this study would contribute to the body of nursing science in two ways. First, it extends the use of the Roy Adaptation Model into the educational setting. Most of the research using the Roy Adaptation Model has been in the clinical setting with nurses and clients. By substituting the instructor-student dyad for the nurse-client dyad, the researcher sought to demonstrate a new use for the model. Secondly, this study examined the validity of the stimuli proposed by Roy and Andrews (1991) to affect role function.

This study is significant to the practice of nursing. As nurses learn to discern their own strengths and weakness, they know where efforts to improve should be directed to enhance their provision of care. Increasing knowledge concerning factors that affect students' ability to accurately evaluate their clinical performance will enhance the efforts of faculty in facilitating improvement of self-evaluation accuracy.

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Lastly, this study has potential implications for nursing management. In this transitional era of health care where more and more services are being provided outside the traditional inpatient facilities, there is an ever increasing need for nurses who can function independently, recognizing their own abilities and limitations. Nurses who are able to evaluate their own skill and require little supervision are optimally prepared to function in these new positions with the end result being lower health care delivery costs.

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Chapter Two

Review of Literature

Evaluation of clinical nursing skills is a common topic in journals dealing with clinical nursing education. Questions such as who should complete the evaluation, when evaluation should be completed, validity and reliability of evaluation tools, and the value of evaluation are all frequently addressed. The purpose of this study was to investigate stimuli that affect the accuracy of student self-evaluation of progress toward role mastery. Because the concept of evaluation is core to this study, the review of the literature begins with an overview of the concept of evaluation as it relates to nursing education. A brief history of evaluation in nursing education follows. Literature related to self-evaluation will be reviewed with emphasis on accuracy of student self-evaluation, pros and cons of self-evaluation, and methods for the implementation of self-evaluation. Finally, a review of Roy Science literature is included to establish the state of Roy science in relation to this study.

The Concept of Evaluation

A number of authors have described evaluation as a process (Dunn, 1986; Girod, 1993; Hepworth, 1989; Sax,

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1974). Krumme (1988) views evaluation as a description of the demonstration of competencies. Another definition of evaluation is that it is "a conclusion about a student's performance that reflects the instructor's personal perception..." (Orchard, 1994, p. 246).

The purposes of evaluation include to assess (Giro, 1993), or make judgements about (Hepworth, 1989) a person's ability and to measure the development of nursing skill (Dunn, 1986; Orchard, 1994). These judgements must be justifiable to others (Hepworth, 1989) and should be uniform, consistent, and fair (Fullerton, Piper, & Hunter, 1993). Fullerton et al. define evaluation as "a judgement that determines the worth, desirability, or acceptability of a phenomenon" (p. 236). They point out that it is "an integral part of the teaching/learning process" and focuses on "behavioral changes that have taken place as a result of learning" (p. 236). Sax (1974) also views evaluation as a value judgment, and states that it should be based on a variety of observations.

Woolley (1977) states that evaluation is a "subjective judgment about the meaningfulness of the

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whole, both from the parts that are measurable, and from those that must be assessed intuitively" (p. 314). A more comprehensive view is espoused by Orchard (1994), who views evaluation as both objective and subjective.

Evaluation can be implemented in a number of ways including observation of actual or simulated client situations (Krumme, 1988) and can take place during a period of formal learning to guide the student (formative evaluation) or at the end of a period of learning (summative evaluation) (Fullerton et al., 1993; Hawks & Hromek, 1992). Leino-Kilpi (1992), points out that process evaluation (formative evaluation) is not intended to be used to make final decisions in the summative evaluation phase. Regardless of the format selected, the three essential elements are criteria, feedback, and self-assessment (Fullerton, Piper & Hunter, 1993).

History of Clinical Evaluation

A review of the methods for evaluation of nursing students progress toward role mastery reflects that

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over the course of nursing education, little has changed with regard to evaluation of nursing student's clinical performance.

In the United States, record of evaluation of students comes from one of the early leaders of professional nursing education. Nutting (1900), in describing the education of visiting nurses, states the student must "satisfy her teachers of her ability to do well" (p. 417) before she is allowed to visit the patient alone or progress to more difficult cases.

As nursing education progressed through the early 1900's, evaluation of students became more formalized. Records of student performance were completed by the floor nurses who were responsible for the supervision of students. These records, which were forwarded to the school administration, were rarely shared with the student and did not in any way reflect the students' perceptions of their progress (Woolley, 1977).

During the 1930's, evaluation of nursing students moved toward a more criterion based format. An example of a course evaluation tool is found in the Archives of the Department of Nursing Education, Teacher's College,

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Columbia University (Fiche 0104). The evaluation tool consists of a list of criteria used for evaluation of students in a course entitled "Ward Management Including Housekeeping" taught in 1930. Students were evaluated on their ability to demonstrate knowledge of principles in a variety of areas including good ward housekeeping, need for equipment, and cost of adequate equipment. Evaluation at this time was very task oriented with little if any emphasis on critical thinking or analysis. There is no indication that students had any input into their evaluation.

Between 1940-1960, the anecdotal record became a popular form of nursing student evaluation (Woolley, 1977). Still completed by floor nurses who were assigned to oversee the student's work, these records tended to focus on behaviors rather than progress and were rarely used to help students see where improvement was needed. A survey of selected schools (n=131), conducted by the Department of Nursing Education, Teacher's College, Columbia University in 1956, reported findings regarding grading practices. Findings of the study indicated that faculty and

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students were oriented to the system. However, numerous problems were identified including (a) little grading uniformity between schools, (b) grading systems used at most schools were the result of group thinking, (c) most faculty perceived their grading system as inadequate and inconsistently applied, and (d) faculty saw great difficulty in objective measurement of clinical performance. Review of the literature reveals that many of these same problems still exist today.

By 1963, discussions branched out to consider what areas of student performance should be evaluated. Alice Rines, who taught at Teachers College, Columbia University, suggested that evaluation should include not only technical skills, but also the student's judgment, ability to communicate, and ability to establish a relationship with the client (Rines, 1963).

Rines suggested the use of a variety of evaluation formats including: (a) anecdotal records, (b) checklists with and without critical elements, (c) patient evaluation, and (d) student self report. The term student self-evaluation was not used since Rines

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believed the student did "not have an adequate framework within which to judge her own performance" (p.52).

In summary, evaluation of clinical performance has been an area of concern in nursing for many years. Attempts at evaluation have generally been summative and task oriented with little emphasis on critical thinking or analysis on the part of the student. The overall impression of the historical documents reviewed is one of little confidence in student self-reflection. Student self-evaluation, mentioned only once, appears not to have been considered a reliable option for evaluation due to the students' limited information regarding what would constitute an acceptable clinical performance.

Evaluation in Nursing Education

As the historical document reviewed above indicate, evaluation has been an ongoing part of nursing education. The literature clearly identifies one of the antecedents to evaluation as being the establishment of criteria on which the evaluation will be based. Walters (1981) describes a study of nurse

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preceptors and new graduates where a learning contract was drawn up prior to clinical experience. Evaluation, done after the clinical experience, was based on the learning behaviors described in the contract. Learning contracts can also be utilized in combination with competency statements (Henfield & Waldron, 1988).

Benner (1984) also describes the development of criteria. However, rather than student-produced learning contracts, Benner outlines levels of practice as a framework for student evaluation. Other authors approach the task by "identifying meaningful criteria concerning student characteristics" (Fullerton, Piper & Hunter, 1993, p. 238). Criteria should be reasonable, consistently applied, and communicated to the student before implementation (Orchard, 1994). Woolley (1977) believes that prior to evaluation the purpose of the laboratory experience should be determined and that the evaluation should be suitable for that purpose.

Many of the concerns related to evaluation have centered on validity and reliability. Development of an evaluation tool that is able to reflect the competence of the BSN nurse in a consistent and

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unbiased manner has been at the heart of the problem. While the literature demonstrates that many evaluation tools have been developed, there is little if any consensus as to which ones are preferable in the actual assessment of students (Woolley, 1977). Not surprisingly, Bondy (1984) was able to demonstrate that a tool based on specific criteria contributed significantly to the accuracy and reliability scores assigned when using an evaluation tool. Dunn (1986) describes a tool for measurement of developing nursing skill designed to be used in the clinical area. Other authors (Benner, 1984; Krumme, 1988; Shearer, 1989), prefer a competency-based tool that can be used in the clinical area or in a simulated nursing situation.

In addition to the antecedents of criteria and tool development, decisions must be made as to who will complete the evaluation and what data will be considered. Personal observation, documented information received from off-site preceptors, verbal feedback from faculty member, and information voluntarily provided to faculty by the student are all possibilities (Fullerton et al., 1993).

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Pollok and colleagues contend that "Instructors, by virtue of their role as teachers, have the right to make professional judgments about the performance of students" (1983, p. 33). Traditionally, during the evaluation of nursing students, areas where the criteria are not met are often pointed out to the student. Following the evaluation, a plan is frequently formulated to assist the student in remediation (Fullerton et al., 1993; Henfield & Waldron, 1988; Orchard, 1994).

Differing philosophies of evaluation, practice experiences, and value systems of the instructor can also contribute to the problem of clinical evaluation (Orchard, 1992). Concern over which areas of clinical performance to evaluate is a recurrent topic in nursing education literature. Faculty recognize that planning, implementing and evaluating a plan of care is a complex task requiring a variety of skills and abilities (Orchard, 1992). There is little consensus in the literature concerning the weight assigned to problem solving, application of theory to practice, deportment, appearance, communication, and skill acquisition in the

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overall evaluation score (Orchard, 1992). Orchard (1994) expresses the opinion that "clinical application of learning" should receive the most weight. However, she provides little support for this argument.

The problem of weighting factors in the evaluation is compounded by the fact that clinical evaluation is usually done with students caring for clients of varying levels of difficulty. In an attempt toward fairness in grading, the instructor must weigh the "fair" performance of a student caring for a very acutely ill client with the "excellent" performance of a student caring for a less ill client. It is difficult to believe that the level of client acuity does not, at times, help or hurt the student's clinical evaluation (Orchard, 1992).

Finally, there are some evaluation concerns specifically related to students who perform poorly in the clinical area. When a student is experiencing difficulty in performing patient care, the clinical instructor often feels a need to supervise the student more closely. Increased supervision may result in increased anxiety for the student. As a student's

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anxiety level increases, success in the clinical area may very well decrease. In addition, as the student is supervised more closely, the instructor may be more aware of the student's mistakes and/or shortcomings, making the performance more likely to be judged unsatisfactory (Orchard, 1994; Owens, 1980).

In a study of nursing student's opinions, Flagler and associates (Flagler, Loper-Powers & Spitzer, 1988) found that evaluation, because of its negative nature, often has a detrimental effect on the development of student self-confidence. Another negative consequence, reported by Policinski and Davidski (1985), is anxiety. These researchers stated that evaluation resulted in anxiety when emphasis in the clinical area shifted from providing students with support and problem-solving skills to evaluation of their abilities.

Self Evaluation

Accurate self-evaluation is recognized as an important skill among many health-related fields. Student self-evaluation has been studied in a variety of health professions including dietetics and medicine. In a study of 43 dietetic students, Cochran and Spears

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(1980) compared student self-evaluation to faculty evaluation of student clinical performance. They found that in most areas of clinical evaluation, over time, student and faculty evaluations of student clinical performance increased in percentage of agreement. However, students at the end of their course of study tended to overrate their own assessment skills as compared to faculty evaluation of student assessment skills. The self-evaluations of students with grade point averages above the mean were found to be more in agreement with faculty evaluations than were those of students with grade point averages below the mean. No other factors influencing self-evaluation were investigated (Cochran & Spears, 1980).

Interesting, and often conflicting, information has emerged from the study of self-evaluation in medical students and residents. In 1977, Morton and Macbeth studied self assessment among 279 fourth-year surgery students who were in their first clinical year. They found that faculty consistently rated the students higher than the students rated themselves. They also found that students with psychological problems,

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especially depression, identified themselves with failing assessment. Additional stimuli that could affect self-evaluation were not investigated in this study. Stuart, Goldstein and Snope (1980) demonstrated similar findings with residents of family medicine (n=56). They found that the residents consistently rated themselves more critically than did the instructors, but that "inter-rater reliability coefficients were highest when criteria were most specific" (p. 639).

In a four year longitudinal study of 211 undergraduate medical students (Arnold, Willoughby & Calkins, 1985), students also consistently rated themselves below ratings assigned by instructors. In addition, the findings demonstrated that while "student's self-evaluations and faculty members' ratings of these students' performances rose year by year, the relationship between the student's and the faculty's ratings decreased through time" (p. 21). By the last year of the study, instructors, on the average, rated the students as superior while the students rated themselves as satisfactory. Information

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on the criterion specificity of the evaluation items was not provided in the report. Student grade point average (GPA) and course grade were not related to self-ratings. However, GPA and course grade were significantly correlated to instructor ratings. The authors suggest that instructors' evaluations of clinical performance may have been biased by the students' classroom performance.

Calhoun, Haken and Woolliscroft (1990) also considered self-evaluation skills of medical students (n=236) over time. Second-year medical students were videotaped while they performed a physical examination. The students then watched the tape and evaluated their performance, as did their instructors. Two years later, the tapes were again shown to the students and their instructors. Since the student evaluations more closely matched those of the instructor in the second set of ratings, the investigators concluded that the self-evaluation skills of medical students improve as they progress through their program of study.

Conflicting results were reported by Sclabasi and Woelfel (1984). In a study of 130 third-year medical

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students, they found a low level of self-evaluation accuracy with some students rating themselves higher and some lower than did the instructors. They were also unable to demonstrate that the students improved in their ability to self-evaluate over the course of one year.

Work done by Palmer in the early sixties brought the value of self evaluation to the attention of nursing faculty. Palmer (1959) found that students were generally able to determine their own grades and that self evaluation contributed to increased self-understanding and self-assessment, helped development of emotional maturity, and saved faculty time.

A frequently cited reason for the use of student self evaluation is that it empowers the student to take responsibility for his or her own learning. Leino-Kilpi (1992), concurs and points out that it "contributes to independence... a long-term goal" (p. 425). The experiences of Hawks and Hromek (1992) demonstrate that, when given the opportunity, students frequently point out their own errors and formulate a plan for avoidance of future mistakes.

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Working from a feminist point of view, Madden (1975) believes that one of the results of evaluation should be to raise the consciousness of students. Madden states that self-evaluation, combined with faculty evaluation, is preferable as it provides students with an opportunity to value their own work instead of asking for approval from an authority figure. Hawks and Hromek (1992) also advocate for student self-evaluation. They conclude that it results in empowerment of the student, increased self-assurance and self esteem, improved ability to evaluate patient outcomes, and independence.

When learning contracts are combined with competency statements, evaluation provides students with an opportunity to "reflect on their current practice and to become self directing and professionally accountable for continued learning" (Henfield & Waldron, 1988, p. 206).

Student self evaluation can be accomplished in a variety of ways. The most commonly cited format in the literature is a narrative evaluation. This format has been shown to contribute to growth in both skill

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acquisition and self esteem (Hawks & Hromek, 1992). Whatever format is chosen for self evaluation, students should be given ample opportunity to compare their evaluations with those of the clinical instructor so that differences can be discussed (Hawks & Hromek, 1992; Leino-Kilpi, 1992; Orchard, 1994).

Review of Roy Science Literature

Sister Callista Roy and the Roy Adaptation Model have contributed significantly to the body of nursing science. In developing the Roy Model, Roy drew principles from both systems theory and adaptation-level theory (Roy & Andrews, 1991) and incorporated and reconceptualized them for implementation in nursing science (Meleis, 1991). In addition, threads from the work of other nurse scientists, particularly Johnson and Henderson (Meleis, 1991), contributed to what would become a new view of nursing. In a pattern seen in the development of many of the other scientific disciplines (Kuhn, 1970), Roy was able to weave the contributions from non-nursing disciplines as well as early nurse

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scientists into the fabric of her own original thoughts to form a new paradigm for nursing science, the Roy Adaptation Model.

Formally published in 1970 (Roy, 1970), the Roy Adaptation Model was implemented as the basis of the curriculum at Mount St. Mary's College where the faculty has continued to "clarify, refine, and extend the basic concepts of the Roy Adaptation Model for nursing" (Roy & Andrews, 1991, p. 3). Meleis (1991) points out that the operationalizing of the theory in the curriculum at Mount St. Mary's College as well as availability of literature and textbooks consistent with the model have resulted in its "enthusiastic adoption" (Meleis, 1991, p. 289) by a number of nursing schools in this country as well as abroad, facilitating the development of theory-based nursing programs across the United States.

While the Roy model includes all parts of the nursing process, it focuses special attention on nursing assessment, providing an indepth and comprehensive model for viewing persons and their environment. By clearly defining the role of nursing

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(Roy & Andrews, 1991), the Roy Adaptation Model acts as a guide for nursing practice as well as nursing research.

The Roy Adaptation Model guides nurse scientists toward two broad areas of research. The first area, focusing on the basic science of nursing, is the "understanding of basic life processes that promote health" (Roy & Andrews, 1991, p. 445). In this area of study, nurse researchers are specifically directed toward study related to "adaptive processes, adaptive modes, and adaptation related to health" (Roy & Andrews, 1991, p. 450). The second area, focusing on the clinical science of nursing, is "understanding how persons cope with health and illness and what can be done to enhance adaptive coping" (Roy & Andrews, 1991, p.445). This broad area is further delineated as to "changes in cognator-regulator, changes within and among adaptive modes, and nursing care to promote adaptive processes" (Roy & Andrews, 1991, p. 450). Attention to these areas of study and incorporation of the definitions of person, environment, and nursing as defined by Roy (Roy & Andrews, 1991) enable the nurse

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scientist to formulate research questions based on a framework of the Roy model (Roy & Andrews, 1991).

Meleis (1991), as well as and Roy and Andrews (1991), describes numerous nursing research studies framed in the Roy model that could be categorized into each of these areas. The studies described encompass a broad range of topics and utilize both quantitative and qualitative research design.

While many studies have been completed using the Roy model for nursing practice, few tools for measurement of outcomes have been developed in the Roy Model. Kuhn (1970) addresses this problem and postulates that as researchers use a particular paradigm to study the area of facts that can be hypothesized directly from the paradigm, one of the results will be the development of tools specifically designed to "bring nature and theory into closer and closer agreement" (Kuhn, 1970).

Summary

In summary, student evaluation is a process that results in a judgement about the student's performance. This judgement should be as objective as possible and

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should be based on predetermined criteria. The process of evaluating student performance, which has changed little since the early 1900's, has consistently demonstrated a number of problems. These problems include selection of criteria for assessment, development of evaluation tools that are valid and reliable measures of student competence, designation of the evaluator, and the effect of student anxiety on performance.

Information from student self-evaluation has been utilized in a number of health-related disciplines with varying results. Studies with nursing students have demonstrated the positive effects of the self-evaluation process. There is a general consensus in the literature that it is beneficial for students to compare their self-evaluation to the evaluation completed by the instructor, and for the student and instructor to discuss differences in the two evaluations.

A review of the literature reveals the work left to be done related to evaluation of nursing performance. Many questions still remain including

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what criteria to evaluate, what measurement tools best reflect performance level, when evaluation should be completed, and who is best able to judge student performance.

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Chapter Three

Methods

Research Design

The purpose of this study was to investigate stimuli related to the baccalaureate nursing student's transition to role mastery as measured by the congruency between the student's self evaluation of clinical performance and the clinical instructor's evaluation of the student. Stimuli that were studied included student perceived self esteem, level of education, area of clinical skill being evaluated, chronologic age, perceived personal physical health, and performance of additional secondary roles by the student. While there were a variety of approaches that could have been utilized in investigating the research questions, a descriptive, prospective, cross-sectional design with students evaluating care given in real clinical situations was chosen. Strengths and advantages of this design included its prospective nature, that the evaluation was completed following planning and implementation of care in real patient situations, and that implementation of this design could be done in a relatively short amount of time with a limited budget.

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Sample

The sample consisted of all junior and senior BSN students (N=200) who were currently enrolled at one large, public university and one small, liberal arts college in the Southeastern United States. Only students who were not Registered Nurses, who were taking the course for the first time, and who were willing to participate were included in study. Prior to the beginning of sample selection, permission was obtained from course coordinators of courses where data would be collected. Courses were selected that provided access to all students and included an inpatient, clinical component. The clinical instructors of student participants were also asked to participate. Data collection required about 30 minutes of each participant's time. Breakfast or lunch (depending on the time of day) was provided to the participants during data collection. Proper procedures were followed to insure that participants could withdraw at any time, that data were confidential, and that participation did not affect course grade.

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Procedure

The sample of students (described above) was identified prior to the end of the first semester of the junior or senior year. Prior to any data collection, student participants were provided information concerning the following:

1. purpose of the study
2. the nature of data to be collected including self and faculty evaluations of their clinical performance; demographic data; and perceptions of their health and self-esteem; and a description of the roles they fill on a daily basis.
3. approximately how much time would be involved in the data collection.
4. absence of known risks involved in the completion of these questionnaires.
5. incentive of breakfast or lunch during data collection
6. absence of penalty for not participating or withdrawing
7. that no one, including faculty, would have access to the data except the researcher.

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Prior to data collection, faculty participants were provided with the following information:

1. purpose of the study
2. the nature of the data to be collected from students
3. approximately how much time would be involved in the data collection
4. voluntary nature of participation
5. absence of known risks involved in the completion of these questionnaires
6. absence of penalty for not participating or withdrawing
7. that no one would have access to the data except the researcher

After verbal information was provided, participants were asked to sign a consent form. These forms and all raw data are stored in a locked cabinet and will be destroyed three years after completion of the project.

Data collection occurred at the end of the semester. At that time, students completed the demographic form, the Self-Anchoring Self-Esteem Scale, the Self-Anchoring Striving Scale, the Rosenberg Self-

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Esteem Scale, and evaluated their clinical performance using the Six-Dimensional Scale of Nursing Performance developed by Schwirian in 1978. At the end of the semester, faculty evaluated the student's performance by completing the Six-Dimensional Scale of Nursing Performance. Students and faculty completed the forms independently. Students and faculty did not have access to each others forms. Responses did not affect the students' grades in any way.

Faculty and student forms were coded for matching using the last four digits of the students' ID numbers. A self-evaluation congruency score was computed for each student by finding the absolute difference between the Six-Dimension Scale of Nursing Performance score assigned by the student during self-evaluation and the score assigned by the faculty member. In like manner, a self-evaluation congruency score was calculated for each subscale for use in answering primary question four.

Instrument Validity and Reliability

The Six-Dimensional Scale of Nursing Performance (SDS) was used for evaluation of clinical performance.

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The instrument is comprised of 52 4-point rating scale items. Based on the nursing process framework, the tool is designed to focus on clinical performance and includes planning, implementation, and evaluation. The items are organized into six performance subscales: leadership, critical care, teaching/collaboration, planning/evaluation, interpersonal relations and communication, and professional development (Schwirian, 1978). Use of the nursing process framework is consistent with the Roy Adaptation Model (Roy & Andrews, 1991).

Content and construct validity were addressed by Schwirian (1978) during instrument development. A total of 76 nursing behaviors were selected from review of the literature, materials and instruments shared by peers, peer input, project consultants, and pilot test responses. Response scores that nursing faculty and administrators had selected as having promise for success and those not selected did differ significantly. Factor analyses were conducted on responses of both new nurse graduates and supervisors. Factor structures from the two groups were highly

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congruent, "with six subscales which cross-cut the seven behavioral constructs as originally conceptualized" (Schwirian, 1978).

Reliability of the SDS was tested by applying Cronbach's alpha on each subscale. Values for alpha ranged from 0.84-0.98, all well above the generally accepted range.

Cantril's Self-Anchoring Striving Scale (Cantril, 1963), was chosen for measurement of perception of general health. The tool (Appendix D) is a 10-step ladder designed to assess well-being at three points in time: past, present, and future. The tool has been used primarily with clients who are experiencing illness. Because the endpoints are self defined by the participant, the ratings reflect individual criteria. Therefore, "traditional notions of reliability may not be applicable to this type of scale" (p. 41). However, "the meaning of the endpoints remain relatively constant for a given individual over time, thereby minimizing error variance " (p. 293). In a 2-year study of 378 community residents (Laborde & Powers, 1985), a test-retest reliability coefficient of 0.65

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was demonstrated. "The face validity of the scale is supported by the overt relationship between the nature of the instrument and the phenomena under study, life satisfaction" (p. 293).

Two tools were chosen for measurement of self concept. The Self-Anchoring Self-Esteem Scale (SASES) (appendix A) is designed to measure both a range of thoughts and feelings concerning physical, social, psychological and/or spiritual characteristics" (Carpenter, 1996). This definition is consistent with the theoretical model chosen for this study as Roy defines self-concept in both the physical self (body sensation and body image), and the personal self (self-consistency, self-ideal, and moral-ethical-spiritual self) (Roy & Andrews, 1991, p. 270).

An adaptation of the Self-Anchoring Striving Scale devised by Cantril in 1965, the SASES "consists of a 10 step ladder anchored at the endpoints with phrases consistent with the construct being measured, e.g; high and low self-esteem" (Carpenter, 1996). The identification of 10 as high self-esteem and 1 as low-self esteem makes "numerical comparisons ... across

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participants possible with this scale" (Carpenter, 1996). In addition, participants are asked to define the endpoints by describing what high and low self-esteem mean to them and to rate their past, present, and future self-esteem. This strategy provides the researcher with qualitative data regarding the meaning of self-esteem to each participant and quantitative data regarding the fluctuation of self-esteem over time.

Tested on several groups including graduate nursing students ($n=47$), the SASES demonstrated a high level of reliability and validity. Two week test-retest reliabilities on past, present and future ratings were assessed using correlation coefficients and data from the sample of nurses. Findings (past: $r=0.89$, present: $r=0.92$, future: $r=0.84$) indicate a high level of reliability.

Content validity was examined using the narrative descriptors of high and low self-esteem. Analysis was complete using a three-step process outlined by Miles and Huberman (1994). Data from this analysis supported the scale's ability to measure self-esteem as an

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evaluation of physical, psychological, social and spiritual characteristics and as a subjective and multidimensional construct (Carpenter, 1996).

Construct validity was examined by administering the Rosenberg Scale as well as the SASES and then comparing the results. The SASES was found to be similar to the Rosenberg Scale in contrasting high and low self-esteem (Carpenter, 1996).

Carpenter's findings indicate that the SASES is psychometrically sound, portable and easily replicated, and easily reproduced requiring only paper and pencil. In addition, the endpoint descriptors enhance the richness of the data by capturing the perceived reality of the participants. For these reasons, the SASES is an appropriate measure of self-concept for this study.

The Rosenberg Self Esteem Scale was also used in measuring self concept. Widely used as a measure of self esteem, the Rosenberg was designed to measure the "self-acceptance aspect of self-esteem" more than other factors. This measure is consistent with the self concept sub-area Roy (1991) describes as self-ideal/self-expectancy defined as "what one would like

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to be, related to what one is capable of being" and her definition of self-esteem (the individual's overall perception of self-worth).

Developed in 1965, Robinson and Shaver (1973) reports that the Rosenberg Self-Esteem Scale has a test-retest correlation over two weeks of 0.85 and acceptable validity in measuring self-acceptance (Silber and Tippet, 1965). The Rosenberg Scale is brief, usually taking less than ten minutes to complete (Carpenter, 1996).

Statistical Analysis

To describe the characteristics of the sample as well as to examine the homogeneity of the sample and check for skewness that would affect the correlational procedures, statistical analysis began with calculation of central tendency and variability of demographic factors and scores from the Self-Anchoring Self-Esteem Scale, Self-Anchoring Striving Scale, Rosenberg Self-Esteem Scale and Six-Dimensional Scale Nursing Performance. Next, a self-evaluation congruency score was computed for each student by finding the absolute difference between the Six-Dimensional Scale of Nursing

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Performance score assigned by the student during self-evaluation and the score assigned by the faculty member.

Primary Questions

Question One: To investigate a correlation between student perceived self-esteem and congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their Self-Anchoring Self-Esteem Scale score.

The Rosenberg Self Esteem Scale was also used to investigate the correlation between student self-esteem and congruency between student and faculty evaluation of student clinical performance. After reverse scoring of Rosenberg Self Esteem Scale items 3, 4, 6, 7, and 9, a total score was calculated. Then a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their Rosenberg Self-Esteem Scale score.

Question Two: To test for difference ($p < 0.05$) in the student's self-evaluation congruency score from

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midterm to semester end, the researcher planned to apply the t-Test for paired samples to the congruency scores collected at midterm and at semester end.

However, due to a lack of participants available for both midterm and end of semester sampling, midterm data were not collected.

Question Three: To find if there was a statistically significant ($p < 0.05$) difference in student's self-evaluation congruency score between juniors and seniors, the t-Test for independent samples was applied to the congruency scores.

Question Four: To test for a difference in students' self-evaluation congruency on the six subscales of the SDS, means were computed on each student's subscale congruency scores. A repeated measures analysis of variance was applied to the computed congruency scores to determine which of the subscale congruency scores was highest for each student. A Wilks Lambda Index was calculated to determine the statistical difference of subscale congruency scores.

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Secondary Questions

Question One: To investigate a correlation between student chronologic age and congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their age in years.

Question Two: To investigate a correlation between student perception of personal health and congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their score on the Self-Anchoring Striving Scale.

Question Three: To examine a correlation between student performance of other secondary roles and the congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and the number of roles they identified on their demographic form (Appendix E).

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Qualitative Analysis

Responses to the qualitative questions in this study were analyzed using the method for content analysis described by Waltz, Strickland and Lenz (1984). This method was deemed appropriate as the data to be analyzed were recorded (written) and content focused. Use of the method allowed for an analysis that was objective, systematic, and reductionistic.

Data were reviewed by a group of four nursing faculty from a small, liberal arts college. All group members had from four to ten years experience in nursing education at the baccalaureate level and graduate degrees in nursing. Group members consisted of all nonadministrative faculty members who volunteered to participate. Administrative faculty members were excluded due to the sensitive nature of the student responses related to instructor performance.

Content analysis was conducted using a nine-step procedure. The analysis began with the definition of a "universe of content to be examined" (Waltz, Strickland & Lenz, 1984, p. 301). Content for analysis in this

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study included all written responses from student participants.

The second step of analysis entailed identification of "characteristics or concepts to be measured" (Waltz et al., 1984, p. 302). In this study the division of the responses by separate questions provided an identification of concepts to be examined.

In the third step of analysis, the "unit of analysis" (Waltz et al., 1984, p. 302) was selected. Care must be taken in this step if unitizing reliability is to be achieved. Single words or word combinations and their synonyms were chosen for analysis in this study.

Completion of step four involved development of a sampling plan. In some instances the entire set of available data is examined. This is generally true when "content analysis is being applied inductively to interview data" (Waltz et al., 1984, p. 303). Because the amount of data was relatively small, the decision was made to analyze all available data.

In step five, a scheme was developed for categorizing the content (Waltz et al., 1984). The

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scheme can be developed "deductively using categories guided by the theory... or inductively deriving categories from the data themselves by identifying clusters of similar data through a data-shuffling-and-sorting procedure" (Waltz et al., 1984, p. 304). For this study an inductive method was chosen with categories emerging as the data were reviewed by the analysis group. An effort was made to keep the wording of categories as close as possible to the wording in the student responses.

Step six and seven of content analysis required the development and testing of coding and scoring instructions. Step eight was the training of coders, and step nine was the actual analysis of data. Since analysis in this study utilized a group method for analysis of all data, the actual process implemented deviated from the one described by Waltz and associates (1984) somewhat at this point.

Prior to the meeting of the research group, the primary investigator arranged for the participant responses to be typed, arranged by identification number, collated, and any identifying information

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(instructor names, etc.) to be removed. Research group members, all of whom were experienced nursing faculty, were asked to review the method described by Waltz and associates (1984). When the group met for data analysis, the method was discussed and questions addressed and clarified. Each member of the group, after signing an agreement for confidentiality, was given a copy of the transcribed participant responses.

To analyze the data, members took turns reading the responses aloud as other group members followed along on their copy of the transcript. The meaning of each response was discussed and organizing categories emerged through the inductive process. Words from each response were recorded and grouped as the reading/discussion continued.

Following the group meeting, the primary investigator reviewed all responses for a second time to assure that all responses were represented in the final analysis. Frequency counts were made and recorded of recurrent responses. Concepts that had emerged from the group reading/discussion were used to organize the responses. A final grouping of all responses under

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their appropriate concept was developed and circulated to group members for their review. This document was discussed at the next group meeting resulting in the collapsing of several groups of words into single concepts. Webster's 9th Collegiate Dictionary was used to help clarify meaning in several situations.

Chapter Four

Results

After data were collected, analysis was undertaken to investigate factors that were related to the baccalaureate nursing student's transition to role mastery as measured by the congruency between the student's self-evaluation of clinical performance and the clinical instructor's evaluation of the student. Analysis of the quantitative data was completed using the SAS statistical package.

A total number of 126 students chose to participate in the study. However, because some faculty members elected not to participate, information from only 102 students was used in data analysis. Data from another 11 participants were removed from analysis involving the congruency score due to missing data points from the Six Dimension Scale of Nursing Performance completed by either the student or the instructor. Of the sample, 67 participants were from a large, public university and 35 were from a small, liberal arts college.

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Demographic Information

Age of the students participating in the study ranged from 18 to 52 with over half of the sample (55.6%) between ages 18 and 22 years. Another 21.2% of the sample was between 23 and 27 years of age. Participants between the ages of 28 and 37 accounted for 17.2% of the sample with only 6% of the sample over the age of 37.

Division of the sample by level revealed that 48% were enrolled in junior nursing courses and 52% were enrolled in senior nursing courses. It is interesting to note that even though only 52% were enrolled in senior level nursing courses, 64.7% of the sample had accumulated enough credit hours to be considered seniors by the college or university.

The sample was comprised primarily of full-time students (76.2%) who were enrolled in greater than 12 credit hours of study. Another 23% were enrolled in between 9 and 12 hours, with only one student enrolled for 6 to 8 hours of credit.

As expected, the sample was predominately female (95%). Most participants were single (61.8%),

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separated (2.9%) or divorced (2.9%). The remaining part of the sample identified themselves as either married (26.5%) or living with a significant other (5.9%).

The majority of the sample was childless (82%). Of the 21 participants with children, 11 participants had only one child, nine participants had two children and one participant had five or more children. Fourteen of the participants had children under the age of six.

Living arrangements of the sample varied, with 17.2% of the participants living alone and another 26.3% living with a friend. Of those that reported living with family members, 26.2% lived with a parent and/or another relative. Another 24.2% of participants lived with their spouse. The remaining participants reported living with a combination of spouse and friend or relative. Only 31.3% of the participants reported having significant caregiving responsibilities for another person.

Many of the participants were unemployed (37.8%) with another 15.3% working less than six hours per week. Of the students who worked more than six hours

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per week, 17.3% reported working 6 to 12 hours per week, 18.4% worked 12 to 18 hours per week, and 11.1% worked greater than 19 hours per week. Only two students reported that they worked more than 36 hours weekly.

Based on student report, participant grade point average (GPA) ranged from 2.00 to 4.00 with a mean GPA of 3.29, standard deviation 0.624, on a scale of 0.00 to 4.00 (skewness = -0.16988, kurtosis = -0.16429). The grades students anticipated for the course in which they were currently enrolled ranged from 2.00 to 4.00 with a mean of 3.29 (skewness = 0.063706, kurtosis = -0.40399).

The Self-Anchoring Self Esteem Scale, used in this study as one of two measures of self-esteem, was completed by all of the student participants (n=102). The student scores on this tool ranged from 3 to 9 on a scale of 1 to 10 with ten being the best possible self-esteem. The group mean was 7.118 with a standard deviation 1.430. Skewness and kurtosis were -0.81155 and 0.347997 respectively.

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The other measure of self-esteem administered in this study was the Rosenberg Self-Esteem Scale. All students completed this scale (n=102) with scores ranging from 16 to 40 on a scale of 10 to 40. The mean score was 32.84 with a standard deviation of 4.91, skewness -0.68847 and kurtosis 0.31. Cronbach Alpha Coefficient calculated for this sample (0.889200) indicated a high degree of internal consistency.

Student perceived health was measured by the Self-Anchoring Striving Scale which has a range of scores from one to ten with ten being the best possible health. The mean score on the student responses was 7.55 with a standard deviation of 1.50 (skewness = -1.02089, kurtosis = 0.293721).

Students were asked to evaluate their clinical abilities using the Six-Dimension Scale of Nursing Performance. The scale, which consists of 50 items, is scored on a one (not very well) to four (very well) scale. A score of zero indicated that the skill was not performed as a part of the clinical experience. Scores have a possible range from 50 to 200. Cronbach Alpha computed for the student self-evaluation scores

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indicated that the tool had a high degree of internal consistency (alpha coefficient = 0.946470) when used by these students. Student self-evaluation scores ranged from 75 to 189 with a mean self-evaluation score of 135.68, standard deviation 24.26 (skewness = -0.16001, kurtosis = -0.27113).

Faculty members who had supervised student participants in the clinical area were asked to evaluate those students using the Six-Dimension Scale of Nursing Performance. Cronbach Alpha computed for the evaluation scores assigned by faculty indicated a high degree of internal consistency (alpha coefficient = 0.956356) for the evaluation tool when used by these faculty. The mean evaluation score assigned to students by faculty members was 112.3579 with a standard deviation of 25.14042 (skewness = 0.278357, kurtosis = -0.07521).

To obtain a measure of the congruency between the score that students assigned themselves on self-evaluation and the score assigned to them by their clinical instructor, the absolute difference was calculated between each set of scores. This score will

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be referred to as the congruency score. Congruency scores ranged 2 to 99. The mean congruency score for study participants was 30.26374 with a standard deviation of 21.59518. It should be noted that the skewness for this measure was 1.071846 with kurtosis of 1.212148.

The Six-Dimension Scale of Nursing Performance can be used as a total indicator of performance or the scale can be broken into subscales for assessment of certain areas of performance. Subscale scores were calculated for each participant and from those scores, subscale congruency scores were calculated.

Quantitative Results

Primary Questions:

Question 1: To investigate a possible correlation between student perceived self-esteem and congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for students' self-evaluation congruency scores and their Self-Anchoring Self-Esteem Scale scores. The analysis indicated that there was not a significant correlation ($r=0.11858$, $p>0.05$).

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To further investigate a relationship between self-esteem and congruency between student and faculty scores, a Pearson's Product Moment Correlation was calculated using the student Rosenberg Self-Esteem Scale Score and the congruency score. Analysis indicated no significant correlation ($r=0.12635$, $p>0.05$).

Question 2: An investigation of changes in the congruency score over the semester was not performed. Faculty time constraints made midterm data unavailable.

Question 3: To study a possible difference between congruency scores of students who were juniors in nursing and those that were seniors in nursing, a t-Test for independent samples was performed. There was not a significant difference ($t = 0.7937$, $p > 0.05$) between the congruency scores of juniors and seniors.

Question 4: To test for a difference among the six subscales of the SDS, a mean was computed on each student's subscale congruency score. Mean subscale congruency scores (Table I) demonstrated that the greatest differences in student and faculty scores were in the areas of leadership and critical care. Student

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and faculty scores were most congruent in the areas of planning/evaluation and interpersonal relations/communications. A repeated measures analysis of variance indicated a significant difference ($p = 0.0001$) in subscale congruency scores. The Wilks Lambda index indicated that congruency scores on the leadership and critical care subscales accounted for a statistically significant ($p = 0.0001$) proportion of variance in the mean scores.

Table I Mean SDS Subscale and ANOVA Scores

Subscale	Mean	Standard Deviation	F Value
Leadership	1.425263	1.149743	30.10
Critical Care	1.21134	0.854087	19.16
Teaching/ Collaboration	0.8625	0.593695	0.07
Professional Development	0.626733	0.431252	----
Planning/ Evaluation	0.615611	0.479317	30.18
Interpersonal Relations	0.575248	0.440546	50.87

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Secondary Questions:

Question 1: To investigate a correlation between student chronologic age and congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their age in years. No significant correlation ($r = -0.05$, $p > 0.05$) between age and congruency score was found.

Question 2: To investigate a correlation between student perception of health and congruency between student and faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their score on the Self-Anchoring Striving Scale. This analysis indicated no significant correlation ($r = 0.12438$, $p > 0.05$) between perception of health and congruency scores.

Question 3: To investigate a correlation between student performance of other secondary roles (number of children, care giving to another individual, marital status, and working) and congruency between student and

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faculty evaluation of student clinical performance, a Pearson's Product Moment Correlation was calculated for each student's self-evaluation congruency score and their self reported number of children, care giving responsibilities, marital status and number of hours worked. This analysis indicated that there was no significant correlation ($p > 0.05$) between number of children, caregiving responsibilities ($r = 0.07199$), marital status ($r = 0.12967$), or number of hours worked ($r = 0.12943$) and congruency score.

Qualitative Results

As previously described, data were transcribed, collated, and analyzed by a group of four nursing faculty which included the primary investigator. Results will be presented by question.

Question 1: If you have a role model, please describe.

Student responses to this query were categorized into three groups. Relatives and friends comprised the largest group of responses ($n=17$) followed by a group that focused on the area of nursing where the role model practiced ($n=16$). The other group of responses

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(n=14) did not mention a specific person. Instead, they identified an attribute of the person the student wished to model.

The most frequently cited role models by students were family members and friends. Of the persons identified, "mother" was the most common response (n=5) followed by "aunt" (n=4), and "cousin" (n=3). Other responses included mother-in-law, sister, and friend.

The group with the second largest number of responses focused on the area of practice. The most common response in this category was "professor" (n=7), followed by "clinical instructor" (n=5), and "staff nurse co-workers" (n=2). The two other responses were "flight nurses" and "Mother Teresa."

The last group of responses centered around character attributes. The most common response was "compassion" (n=4), followed by "knowledgeable" (n=3), "character" (n=2), and "problem solver" (n=2). Other responses included "professionalism," "patient advocate," and "organized".

Question 2: Describe your relationship with your clinical instructor for this course.

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While some students (n=20) indicated that they had a negative relationship with their clinical instructor, most student responses (n=67) described a positive relationship. Responses that indicated a positive response could be broadly divided into professional relationships and personal relationships. Within the group of responses describing a professional relationship, several themes emerged.

Some students simply described a "professional relationship" that was characterized by "professional respect," "a professional distance," "knowledgeable and easy" or "student-teacher, not personal or friendly." Other students, while describing a professional relationship, provided more detail about the positive aspects of the relationship. From these comments, five themes emerged that were descriptive of the relationships: facilitating, nonjudgmental/communicative, mentoring, evaluative, and care giving. After the second review of the data, the responses that had been labeled as "care giving" were believed by the group to be similar to those responses in the category

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labeled "facilitating." These two groups were combined and the label "facilitating" was retained.

Many students (n=33) described a student-clinical instructor relationship that facilitated their learning. Words frequently encountered included "helpful," "patient," and "challenging." Students reported that their instructor "made me think of everything" or "provided assistance when needed." Other students comments included the instructor "made me calm," "was receptive to my needs," and "Always positive! She nurtures a challenging yet relaxed learning environment where we are always pushing ourselves and learning why we do procedures and how they fit into the nursing care plan." Overall, the responses in this group seemed to indicate that the relationship was a positive one because the instructor seemed to enjoy teaching and had a desire to help the student learn.

Frequent, nonjudgmental communication also appeared to contribute significantly to a positive student-clinical instructor relationship. In describing their relationship with their instructor,

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student responses (n=21) often included words related to communication such as "open," "receptive," "informative," and "accessible." In describing their positive relationship, students frequently mentioned that there was a "give and take of thoughts and opinions," that they were able to "communicate openly and honestly," that they were "comfortable asking questions and getting suggestions from instructors," and that they "weren't scared to ask for help." One student described her relationship with her instructor by saying, "We have a good relationship of praise and constructive criticism from instructor to student and an open 'can ask questions' relationship from student to instructor." These students seemed to have an open, communicative relationship with the instructor that was based on trust that the instructor would be nonjudgmental and willing to listen to their worries, questions, and concerns.

Mentoring of students by faculty seemed to contribute to the positive relationship described by some of the students (n=9). They described relationships that were "supportive" and could "build

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confidence." Respect was a frequently used word, with the term "mutual respect" appearing three times. Students seemed to appreciate being "treated with respect" and being "treated ... more like a colleague." This aspect of the teacher-student relationship was seemed to be summed up by one student when who wrote, "she made me want to achieve more and be the best."

Eight students described their positive relationship with their instructor as having an evaluative component. Most of these responses indicated that the provision of "constructive criticism," "correction" and/or "daily input on performance" had helped to make the relationship a positive one. Most students made the point that the combination of evaluation and communication contributed to the positive aspect of the relationship.

While most student responses described professional relationships, some (n=16) of the students described relationships that were more personal. These students used words and phrases that one would commonly use when describing a friend such as "amicable," "friendly," and "fun." The relationships appeared to

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be close, with one student writing "Close, I felt as though I could open up to my instructors." Student responses indicated that they communicated with their instructor about nonschool related topics. Students described their interactions with their instructor by writing, "she listens to my thoughts and feelings," "[she is] openly accepting of problems," and "I feel I have a very close relationship with my instructors. I feel I can go to him personally or professionally for anything. He is like my friend."

Of the students who described negative relationships with their instructors, there appeared to be three groups of problems: judgmental, intimidating, and noncommunicative. The most common negative responses (n=9) centered on judgmental behaviors of the instructor. While two students identified their instructor as "hard" or "very tough," most responses in this group centered around the overwhelming abundance of negative feedback, often coupled with the absence of any positive comments. Students wrote that they "never get positive feedback," "only know what is wrong," and "no clue what we do right." Two students

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mentioned that their instructor never said "you did well" or "good job."

A second group of students described their relationship with their instructor as intimidating. These students wrote that the instructor made "me nervous" or that they were "scared at first." One student felt that the instructor wanted "to make you look stupid, even in front of patients." With this perception, it is not surprising that students felt that they "needed to find out things for myself" or were "intimidated at times; they [the instructor] know so much more than I do."

The last group of negative responses (n=3) described relationships that were "noncommunicative." Terms such as "vague," and "harsh" were coupled with "you could go to her if you could catch her in her office."

Question 3: What factors have helped or hindered your progress in this course?

Answers to this question were first divided into factors that helped progress (n = 66) and factors that hindered progress (n = 61). Several themes emerged from

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each of these groups. Factors that students felt had helped their progress included instructor actions and attitudes, clinical experience, personal attitudes and abilities, time, and support of family and friends. In the first listing of themes for this questions, "student knowledge base" was listed as a separate category. However, on second review by the research group, it was consolidated with the theme "personal attitudes and abilities," and the label "personal attitudes and abilities" was retained.

Of the factors identified by students as helping them to make progress, the most frequent responses (n=35) centered on instructor actions and attitudes. Instructor actions that were mentioned included being "willing to help," "taking time to go over a procedure before going into the [patient] room," "having a review day" or "study guide," and "individual test review after the exam." Instructors that provided "constructive criticism," especially when coupled with "encouragement" were cited as being particularly helpful by several students.

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An open and respectful attitude on the part of the instructor seemed to be as important as the instructor's actions. Comments such as "respectful and professional attitudes of instructors," "feeling I could ask questions," "ability to relax with instructors and ask even 'stupid' questions," and "a good and patient instructor helped a lot" were commonly seen. In the words of one student, "finding out instructors really do care helps a lot."

Closely tied to comments about instructor attitudes and abilities were comments that focused on clinical experiences (n = 8). Students wrote that it "helped just being in the hospital." "Hands on experience" and the "staff's advice or help" were cited as "helpful." In short, "clinical ... brought what we learned in lecture and made it real."

The student's own attitudes and abilities were frequently mentioned (n = 13) among these responses. Students mentioned "personal motivation," "making a decision to be more confident and try not to be intimidated" as important personal attitudes. Three

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students pointed out that studying a "topic that I'm really interested in" was also helpful.

Personal knowledge and ability were recognized by the students as being helpful in their progress. "Studying my butt off," "keeping up and spacing assignments throughout the semester," and "being in class everyday" were all mentioned by students. Other students mentioned "prior work experience" and "critical thinking" as factors that were helpful to them.

The support of family and friends was cited by students (n=8) as being helpful in making progress. Comments related to the student's peer group such as "senior students helped a lot," "studying with friends," and "peers' encouragement" were common. One student wrote, "Peers in my clinical group help...we band together and give each other support and praises when deserved." Only one student specifically mentioned "family support" as a factor which had helped his/her progress.

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Time was mentioned as a factor by two students. Being enrolled in fewer hours than classmates and "having enough time to do all the readings" were cited as helpful.

A total of seven categories emerged in the analysis of responses concerning factors that had hindered students in clinical progression. Themes that were apparent in responses concerning hindered progress included instructor attitudes and actions, clinical experience, amount of work for time available, other secondary roles, personal limitations, unclear expectations, and testing. After a second review of the data, the responses that had been in the "unclear expectations" category were reassigned to "testing" and "clinical experience."

Comments related to clinical experience were frequently (n=17) mentioned among the list of factors hindering progress. Hospital staff who were either "rude and unfriendly" or "not willing to let us observe or help" were cited by students as problems. Several student comments such as "not enough lab time," "lack of experiences," "having only one patient limits

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exposure," and "I feel I haven't practiced my skills enough" seemed to indicate a feeling that clinical experiences had been too limited.

Students also perceived that limited time with the instructor in the clinical area had hindered their progress. Comments such as "too many students on the floor for the teacher" and "little opportunity to discuss care plan with instructor so not sure what is expected" were common among the responses.

Nine student responses focused on problems associated with instructor attitudes and/or actions as hindering their progress. "Bad lectures," "disorganized classes," and "information given at beginning of course that isn't used until near the end of the course" were some of the comments related to the administration of the course. Even more common were comments related to the clinical instructor's role. "High [instructor] expectations resulting in shame," "being intimidated," and instructors with "apathetic" attitudes were all mentioned as hindering progress. In the words of one student, "The clinical instructor.

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Many days I leave the hospital feeling bad even though I know I've done a good job."

While only two students mentioned "time" as a factor that had helped their progress, many (n=21) students identified time as a problem in their progress. Comments such as "so much to do in so little time," "difficult if not impossible to complete required reading," and "overload of work...assignments due constantly" demonstrate student perception of workload. Student comments such as "too much to do - too little sleep," "lack of sleep from too much reading," and "lack of sleep from having to preplan the night before" were common. Several students wrote that their time was taken up with "busy work" and "stuff that's basically useless." Another wrote "we spend so much time gathering materials and writing care plans when there is so much to gain from taking time to interact and learn."

Time spent in fulfilling the responsibilities of secondary roles was also viewed as a hindrance to progress by many (n=17) students. Activities associated with the student role such as "ROTC,"

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"playing sports," "campus life," and simply "trying to be college student and a nursing major simultaneously" resulted in students being unable "to focus attention to nursing."

Secondary roles associated with family responsibilities also impacted progress for some students. Constantly being pulled "between school and family," "too many obligations- home, family, kids," "family crisis situations," and "marital problems" all seemed to contribute to a situation that one student summarized as "family problems, seems I can never find enough time to devote to study."

Personal limitations were cited by seven students as a factor that hindered progress. Getting "down on myself," "decreased self confidence," and "self doubt" were all mentioned by students. Other personal limitations included "inability to think critically," "feelings and fears about childbirth," and "not knowing how to study for tests."

Several students (n=9) noted that testing had hindered their progress in nursing. Testing in general deemed to be a concern with particular worry expressed

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about "difficulty," "need to apply knowledge," and the stress of having to achieve "a 75 average." One student wrote that their "test taking strategies are below par" while another wrote "I don't test well, [but] do better in clinical."

Question 4: In the clinical area, what do you think are the main things on which you were evaluated?

In the analysis of the data from question four, eight categories emerged. They included four parts of the nursing process (assessment, planning, implementation, and evaluation) as well as communication, professional issues, problem solving, and competency.

The category of assessment had a total of 25 responses. Of those, emphasis seemed to be on data gathering and "adequate knowledge."

Of the students who perceived that evaluation had been focused on planning, by far the most common response (n=21) was "care plans." Students also mentioned "preplanning," "preparation," and "prioritizing."

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Of the 102 students participating in this study, 92 of them gave at least one response that was represented in this category. Many students (n=39) cited skills as one of the main things on which they had been evaluated. Several other responded "tasks," "procedures" or "performance." Many other students cited medication administration as important component of evaluation.

Implementation of care giving, cited under a variety of titles including "effective care," "holistic care," "adequate care," and "patient care," were common answers. "Safety" was frequently mentioned either by itself or in association with other responses related to implementation.

It is interesting to note that the implementation category was the only one that elicited responses related to negative evaluations of the student by the instructor. One student wrote, "not doing something stupid" and another responded "doing it in the way that instructor wants it."

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Evaluation of care was the category that had the fewest responses. Only three students perceived that this was a main factor on which their evaluation had been based.

Thirty-two students submitted responses that were related to communication in the clinical area. Interaction with patients was frequently mentioned (n=32) most often. Other responses focused on communication with staff, families, instructors, and peers. "Patient teaching" and "therapeutic interaction" were also mentioned by students.

A variety of professional issues were cited by students as being important in evaluation by their instructor. Personal qualities such as "confidence level," "assertiveness," the "way you conduct yourself," "appearance," "punctuality," and the student's ability to "withstand pressure" were all cited. Other student responses focused on attitudes toward patients, other students, and hospital staff. Additional responses included "team work," acceptance of "constructive criticism," "ethics," and "effort."

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Eleven students simply wrote the word "competency." These answers were categorized by themselves since it was unclear exactly to what the students were referring.

The remaining theme of the responses to this question, problem solving, encompassed answers related to "organization," "ability to grasp and apply knowledge" and "think for [your] self." "Critical thinking" was a common answer.

Question 5: If anything unusual has happened during the semester that you feel may have affected your clinical performance, please describe.

Unusual occurrences that affected student performance were first divided into positive and negative effects, and then categorized. Three themes emerged from the negative student responses. They were labeled personal situations, instructor related problems, and clinical related problems.

Student responses that related to personal situations related most often involved family problems. Students cited "life things," "illness," and "decreased family support." Other responses included

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"my intelligence left me," and "I didn't know how to do a skill." Almost one-third of the responses in this category related to sleep loss.

Problems with an instructor made up a small part (n=2) of the responses to this question. Both responses related to unavailability of the instructor.

The other group of negative responses to this question related to the clinical experience. One student wrote, "My first patient died in the middle of my shift and I was left in the room with the entire family while no other nurses were there, just to keep the machines from beeping while the patient failed. It made me feel like I probably should have not been given a patient like that at my level (junior), but it also was a self test to see if this is really a career I can handle. Other responses related to limited practice as evidenced by comments such as "no one came to my teaching session" and "decreased opportunity to give care." Some responses focused on "decreased staff support" and frequent changing of clinical sites.

Of the 24 students who cited unusual occurrences that had affected their performance, only three of them

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wrote about something unusual that had positively affected clinical performance. Two of these responses related to having a peer group or clinical situation that "increased my confidence." The other response, "I had a good instructor" speaks volumes about this student's perception of his or her educational experience up to this point!

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Chapter Five

Discussion and Implications

This chapter will begin with a discussion of the study conclusions including alternative explanations for the findings; the impact of what was learned in the study; and strengths and weaknesses of the study. Implications of the study for professional practice, scholarly understanding, theory building and future research studies will follow. This chapter will conclude with a discussion of recommendations for further research including a discussion of potential research methods for study of related questions.

Discussion

The Roy Adaptation Model defines role mastery as the demonstration by the client of both instrumental and expressive behaviors that meet societal expectations associated with the role (Roy & Andrews, 1986). Most investigators using the Roy Model as a conceptual frame for their work have focused their attention on the traditional nurse-client relationship. However, in this study, the clinical instructor is placed in the nurse role and client role is filled by the nursing student who is attempting to master the

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role of nurse. According to Roy, factors related to role mastery include the individual's self concept, knowledge of expected behaviors, chronologic age, physical well-being, performance in other roles, role models, cooperation/collaboration, and knowledge of expected behaviors.

Quantitative Findings

Primary Question Conclusions

The analysis of data for primary question one indicated that there was only a very weak, nonsignificant correlation between student role mastery and self concept as measured by student-faculty congruency scores and both the Self-Anchoring Self-Esteem Scale and the Rosenberg Self Esteem Scale. The Roy Adaptation Model suggests that self concept and role mastery are related. The quantitative data from this study failed to demonstrate that relationship.

As described earlier, question two was not tested. This deletion was due to the hardship, i.e. time consumed, that completion of the evaluation form on two separate times would have caused for the faculty participants.

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Questions three investigated a possible difference in congruency scores of students who were juniors in nursing and those who were seniors. Previous studies have reached conflicting findings regarding this question. Some researchers have found an increase (Calhoun, Haken & Woolliscroft, 1990; Cochran & Spears, 1980) while other studies indicate a decrease (Arnold, Willoughby & Calkins, 1985) in the congruency between self and instructor evaluation as students progressed in their program of study. Analysis of data from this study demonstrated that there was not a significant difference in the congruency scores of juniors and seniors ($p>0.05$). Therefore, this study failed to demonstrate progression of seniors toward role mastery with regard to time in the program. Assuming that senior students should be more familiar with the societal expectations of nursing, these findings are not consistent with the stance of the Roy Adaptation Model.

Question four examines possible differences in the subscale scores. As noted earlier, there was a difference in the level of congruency between the

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subscales with student and faculty scores being most congruent in the area of interpersonal communication, professional development, and planning. Areas where there was a high degree of incongruence between students and faculty included critical care skills and leadership. It is interesting that, while a large number of students felt that their clinical skills were one of the main things they were evaluated on, the critical care skills subscale demonstrated next to the highest incongruence between student and faculty scores.

Secondary Questions

This study demonstrated a very weak correlation between chronologic age and role mastery (question one) as measured by congruency between student self-evaluation scores and scores assigned to students by clinical instructors. This finding is inconsistent with the Roy Adaptation Model which postulates that age will be related to role mastery (Roy & Andrews, 1986).

A very weak, nonsignificant correlation was also demonstrated between perceived health and role mastery. This finding is also inconsistent with the Roy Adaptation Model.

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The last secondary question addressed whether or not performance of additional secondary roles was related to role mastery. This study examined the role of parent as measured by number of children, the role of spouse as measured by marital status, the role of care giver as measured by self report of care giving responsibilities, and the role of employee as measured by hours worked per week. All of these secondary roles demonstrated a very weak correlation with role mastery as measured by student-faculty congruency on the Six-Dimension Scale of Nursing Performance.

Qualitative Findings

The purposes of qualitative research are to describe and interpret the "human experience in ways that promote understanding, provide insight, or challenge existing beliefs about, or perceptions of, social situations and human experience" (Powers & Knapp, 1990, p. 116). In keeping with the purpose of qualitative research to view the participants' experience as a whole, this discussion will integrate data from all questions rather than separate the discussion by individual question.

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Much of the qualitative data concerning factors related to progress toward role mastery focused on the student's perception of the clinical instructor. While this focus might have been expected in the question that specifically addressed student-teacher relationship (question two), it also emerged in relation to role models, factors that had helped/hindered progress, and even unusual occurrences that had arisen during the semester.

Positive student-teacher relationships were frequently characterized as facilitating progress. Help from the instructor in terms of answered questions, modeled behaviors, and willingness to assist as needed were a few of the ways that students recognized faculty actions and attitudes as having helped them make progress.

The theme of student-teacher communication as a positive and helping factor also emerged repeatedly. Comments with positive connotation frequently mentioned open, honest, two-way communication between the student and the instructor as being helpful. This communication, combining constructive criticism with

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encouragement, was perceived by many students as facilitating their progress toward role mastery.

On the other hand, many of the comments related to factors that had impeded progress also centered on the student's relationship with the instructor. Instructor behaviors that resulted in limited student access to information concerning clinical objectives and student progress were cited by many students as hindering progress toward role mastery. These findings appear to be consistent with the findings from previous studies (Flagler, Loper-Powers & Spitzer, 1988) concerning both positive and negative instructor facilitation and communication. They also support the Roy Adaptation Model tenet that instrumental behaviors are related to access to facilities/set of circumstances in facilitating role mastery (Roy & Andrews, 1986). However, self-concept scores were unrelated to role mastery in the statistical analysis.

Several students cited their own personal limitations as hindering their progress. Comments concerning "being down on myself" and "decreased confidence" would seem to indicate a problem with self

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concept. In addition, student responses indicated that judgmental and intimidating instructor behaviors had hindered their progress. Since these behaviors could be expected to negatively affect student self concept, these comments may support Roy's stance that self concept as well as the instrumental behaviors of cooperation/collaboration have an impact on role mastery (Roy & Andrews, 1984). However, self-concept scores were unrelated to role mastery in the statistical analysis.

Time, especially as it relates to amount available for fulfilling of responsibilities resulting from secondary roles, was also a theme that reached across the data. Many students cited difficulty in progressing in the nursing role because of the conflicting demands of other roles. Other roles that were frequently mentioned included family "member" and "student." Student responses related to fulfillment of secondary roles appear to be supportive of Roy's assertion that additional secondary roles can interfere with role mastery.

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Time, or the limitation there of, spent with the instructor also emerged as a repeated theme in the data. Many students considered time spent with the instructor, be it in class, in preparing to give care, or actually providing care to clients, as helpful in their progress. Increased time in the clinical area for the practice of care giving behaviors was also frequently cited as an important factor in helping the student to progress. These frequent references to time may well support the assertion by Roy that time, as it relates to the instrumental behavior of access to facilities/set of circumstances, is an important factor in role mastery.

Role mastery as described by Roy entails "demonstration of both expressive and instrumental behaviors" (Roy & Andrews, 1984, p. 367) by the client. Overall, participant responses seem to indicate a good grasp of instrumental behaviors as they relate to main areas of evaluation. Major parts of the nursing process were addressed by many students. In addition, the theme of professional issues included many of the societal expectations of the nursing role. While there

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was a greater emphasis on "skills" than might be expected from students in Baccalaureate programs, this may well represent the message that clinical instructors unknowingly convey to students. Other sources of focus on skill mastery could include negative comments from the nursing community-at-large regarding a perceived lack of clinical skill in the baccalaureate graduate nurse. Another factor that may contribute to student emphasis on skill mastery is that clinical skills represent learning on a concrete level as opposed to more abstract concepts that are often difficult for students to master.

In summary, quantitative analysis of this data failed to find any factors that appear to be related to student role mastery as measured by student-faculty congruency on evaluation of clinical performance. Further, the quantitative data failed to support the Roy Model's prediction of factors that would be related to role mastery. However, the qualitative responses of the participants painted quite a different picture in relation to factors that are related to progression toward role mastery. Taken as a whole, these responses

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supported not only the instrumental and expressive behaviors cited by Roy, but also several of the additional factors listed by Roy as affecting progression toward role mastery. Several explanations for these findings are proposed.

Alternative Explanations for the Findings

There are several possible explanations as to why no relation was found between the variables considered in the quantitative analysis. The first is that, in fact, there is no relation between the variables. While the qualitative analysis does not seem to support this fact, this possibility must be considered.

A second possible explanation lies in a potential problem with the measurement instruments. It is possible that the Six-Dimension Scale of Nursing Performance failed to accurately measure student performance. However, with Cronbach Alpha Coefficients of 0.946470 and 0.956356 on student and faculty evaluations respectively and no undue skewness or kurtosis on either the student self-evaluation or the faculty evaluation of the student, this explanation loses some credibility.

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It is possible that the calculated congruency scores were misleading. Items in the Six-Dimension Scale of Nursing Performance were not tailored to evaluate the particular clinical skills required for the class in which the students were enrolled. If there was a large discrepancy between skills the student had performed, either out of class or with another instructor, and the skills that the instructor who completed the evaluation actually observed being performed, then the inclusion of several "zero" scores (indicating skills that the instructor did not observe the student performing) could have made the student self-evaluation scores appear inflated and led to an overly large congruency score. It is quite possible that this could have affected the outcome of this study.

A third possible explanation lies with the student-faculty sample used in this study. In retrospect, it is noted that some faculty had as few as four days in the clinical area with the students they evaluated. While it is common practice in many schools of nursing for students to rotate among a variety of

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instructors over the course of the semester, it is possible that only a few days of interacting with the student in the clinical area is not enough time to enable the clinical instructor to give a complete and accurate evaluation of the student's ability. Also, because the instruments were completed by faculty after the end of the semester, several weeks may have elapsed between the time of supervision of students and completion of evaluation forms.

A fourth possible explanation may lie in concept definition. As Roy herself points out, "conceptual definition of variables is key to the research" (Roy & Andrews, 1986, p. 455). While the measurement instruments that were utilized in this study appear to be consistent with concepts that Roy proposes to be related to role mastery, it is possible that they did not capture the entire meaning of one or more of those concepts. Discussion with the theorist might help to clarify this explanation.

A final possible explanation for the findings of this study lies in the area of methodology. A large number of student participants were lost to the

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analysis in this study due to missing data. Several faculty members did not complete an evaluation form on student participants making it impossible to compute a congruency score for those students. While the primary researcher did not elicit a reason from those faculty members as to why they had not participated by completing the evaluation forms, reasons volunteered by the faculty centered around time constraints.

With regard to interpretation of the qualitative findings of this study, it must be remembered that acceptance of qualitative findings includes acceptance of the assumptions inherent to qualitative research. That is, the researcher is the tool, reality is as it is perceived by the participant, there is not a single reality, reality changes over time, and what we know has meaning only within a given situation.

These assumptions give rise to two important questions regarding these data. First, is the analysis biased due to the familiarity of the primary researcher with the Roy Adaptation Model? While this familiarity may have had some influence on the analysis, care was taken to minimize impact through the use of a

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standardized method of content analysis. In addition, the other faculty members who comprised the research group had limited knowledge of the Roy Model, and none of them had reviewed the research proposal or content in writings by Roy pertaining to role mastery.

The second question related to the qualitative findings of this study concerns the assumption of single reality and its affect on generalizability. Even though the data collected in this study were from participants from two very different institutions and represented a fairly wide cross section of demographic characteristics, the fact of the matter is that these findings represent reality as perceived by this group at one moment in time. Therefore, any generalization of these findings should be made with caution.

Strengths and Weaknesses

Many of the strengths, weakness, and limitations of this study have already been alluded to. Strengths include the prospective, cross-sectional design with students evaluating care given in real client settings as opposed to case studies, the relatively large sample

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size, and the use of students from two different institutions.

There are, however, some notable weaknesses. These include loss of a considerable portion of the sample due to incomplete data, bias that is inherent in the clinical evaluation process, potentially misleading student-faculty congruency scores, and the limited generalizability of qualitative findings. The conflict between the quantitative and qualitative findings of this study further emphasize the need for continued work in this area.

Practice Implications

In the qualitative analysis of this data, the frequency of responses related to the clinical instructor clearly points to the importance of the clinical instructor in student progression toward role mastery as perceived by these participants. The data from this study are consistent with that of other studies (Meisenhelder, 1987; Mozingo, Thomas & Brooks, 1995; Slevin & Harter, 1987) concerning the importance of instructors having a caring relationship with students. While generalizability should be done with

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care, these data leave little doubt concerning the importance of an open, honest, and caring relationship between student and clinical instructor. In short, "students do model faculty behaviors; therefore, attention should be paid to faculty caring attributes (Slevin & Harter, 1987, p. 26).

The data point to the need for frequent, constructive criticism of students that combines information related to both negative and positive behaviors. Supporting the findings of other writers (Burnard, 1988; Hawks & Hromek, 1992), students repeatedly wrote of a need to know both what they do right and what they do wrong.

Lastly, the data from this study point out the overwhelming demands that many of current nursing students face. The time when our teaching methods and assignments can be successfully geared to only those "traditional" students who have limited responsibilities outside the classroom are past. As nursing education reaches out to students with varied secondary role responsibilities, nursing faculty must search for new, more efficient means to make the most

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of the time that students have to spend on mastering the nursing role. Insensitivity on the part of nurse educators to the learning needs of the nontraditional student will result in the loss of many "bright, caring, and responsible person[s]" to the nursing profession (Moran, 1987, p. 38).

Implications for Further Study

The field of nursing research is expanding at a tremendous rate. However, the degree to which this expansion of knowledge will actually advance the science of nursing is dependent on the extension and testing of nursing theory. Some difficulty was experienced by this researcher in attempting to locate measurement instruments that would adequately capture the true meaning of the concepts proposed by Roy to be related to role mastery. If the Roy Adaptation Model is to continue to be developed and extended, further work is needed in development of measurement tools that will accurately measure the concepts of the model. Repetition of this study using measurement tools more sensitive to the concepts described by Roy or participation by instructors who are able to spend

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increased amounts of time with students before evaluation may yield very different results.

A major problem encountered in the methodology of the this study was the time required by both student and faculty participants. While a good number of students and faculty chose to participate, a considerable portion of the sample was lost due to failure of faculty members to complete evaluations of the students who participated. A future study might attempt to use the clinical evaluation tool routinely used for evaluating students in the course instead of the Six-Dimension Scale of Nursing Performance. This strategy would eliminate the need for the instructor to complete two clinical evaluations for student participants. There are, however, two disadvantages to this suggestion. Use of different evaluation tools in different classes might decrease the consistency of evaluation between students enrolled in different classes. In addition, clinical evaluation tools utilized in course evaluation have not generally been subjected to psychometric testing. The lack of such

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testing could lead to a problem with internal validity and reliability.

The design of this study proved to be impractical for a study of changes in congruency of student-faculty congruency over the course of the semester. This is an area where many questions still remain. Future researchers might choose to investigate whether or not there is a change in congruency over the semester, whether there is a difference in changes among juniors and seniors, and whether seniors demonstrate greater changes in congruency in the final weeks before graduation. Additionally, it would be interesting to follow students from the beginning of upper division nursing courses through their first year of practice to investigate changes in their ability to evaluate their own clinical skills.

In summary, many questions still remain concerning progress toward role mastery by nursing students. Answers to them can only be found as nurse researchers continue to explore the factors that influence the ability of students to meet the expectations that both the nursing profession and society at large has defined for nurses.

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APPENDICES

Role Mastery

Appendix A

Self-Anchoring Self-Esteem Scale

Below is a picture of a ladder. The top of the ladder represents high self-esteem and the bottom of the ladder low self-esteem. Where would you place your own present state of self-esteem? Circle the number for your response.

10 best possible self-esteem

9

8

7

6

5

4

3

2

1 worst possible self-esteem

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Appendix B

The following is a list of statements of how you feel about yourself. Please circle the number that best corresponds with what you feel.

1. strongly disagree 2. disagree 3. agree 4. strongly agree
-

- | | |
|---|---------|
| 1. I take a positive attitude towards myself. | 1 2 3 4 |
| 2. I feel that I have a number of good qualities. | 1 2 3 4 |
| 3. I wish I could have more respect for myself. | 1 2 3 4 |
| 4. All in all, I am inclined to feel that I am a failure. | 1 2 3 4 |
| 5. I feel that I'm a person of worth, at least on an equal basis with others. | 1 2 3 4 |
| 6. I feel that I do not have much to be proud of. | 1 2 3 4 |
| 7. At times I think I am no good at all. | 1 2 3 4 |
| 8. I am able to do things as well as most other people. | 1 2 3 4 |
| 9. I certainly feel useless at times. | 1 2 3 4 |
| 10. On the whole, I am satisfied with myself. | 1 2 3 4 |

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Appendix C Six-Dimension Scale of Nursing Performance

Performance of Nursing Behaviors

Instructions: This section contains a list of activities in which nurses engage with varying degrees of frequency and skill. For those activities that you do perform in your current course, please indicate how well you perform them by using numbers from the following key:

- 1 - not very well
- 2 - satisfactorily
- 3 - well
- 4 - very well
- 5 - not expected in my current course

- TC ___ Teach a patient's family members about the patient's needs.
- PE ___ Coordinate the plan of nursing care with the medical plan of care.
- L ___ Give praise and recognition for achievement to those under your direction.
- TC ___ Teach preventive health measures to patients and their families.
- TC ___ Identify and use community resources in developing a plan of care for patient's condition.
- PE ___ Identify and include in nursing care plans anticipated changes in patient's condition.
- PE ___ Evaluate results of nursing care.
- IPR ___ Promote the inclusion of the patient's decisions and desires concerning his care.
- PE ___ Develop a plan of nursing care for a patient.
- PE ___ Initiate planning and evaluation of nursing care with others.
- CC ___ Perform technical procedures: e.g., oral suctioning, tracheostomy care, intravenous therapy, catheter care, dressing changes, etc.
- TC --- Adapt teaching methods and materials to the understanding of the particular audience: e.g., age of patient, educational background, and sensory deprivation.,
- PE --- Identify and include immediate patient needs in the plan of nursing care.

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- TC ____ Develop innovative methods and materials for teaching patients.
- IPR ____ Communicate a feeling of acceptance of each patient and a concern for the patient's welfare.
- IPR ____ Seek assistance when necessary.
- IPR ____ Help a patient communicate with others.
- CC ____ Use mechanical devices: e.g., suction machines, Gomco, cardiac monitor, etc.
- CC ____ Give emotional support to family of dying patient.
- IPR ____ Verbally communicate facts, ideas, and feelings to other health team members.
- IPR ____ Promote the patient's right to privacy.
- IPR ____ Contribute to an atmosphere of mutual trust, acceptance, and respect among other health team members.
- L ____ Delegate responsibility for care based on assessment of priorities of nursing care needs and the abilities and limitations of available health care personnel.
- IPR ____ Explain nursing procedures to a patient prior to performing them.
- L ____ Guide other health team members in planning for nursing care.
- L ____ Accept responsibility for the level of care provided by those under your direction.
- CC ____ Perform appropriate measures in emergency situations.
- TC ____ Use teaching aids and resource materials in teaching patients and their families.
- CC ____ Perform nursing care required by critically ill patients.
- TC ____ Encourage the family to participate in the care of the patient.
- TC ____ Identify and use resources within your health care agency in developing a plan of care for a patient and his family.
- IPR ____ Use nursing procedures as opportunities for interaction with patients.
- IPR ____ Help a patient meet his emotional needs.
- PE ____ Contribute to the plan of nursing care for the patient.
- CC ____ Recognize and meet the emotional needs of a dying patient.

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- TC ____ Communicate facts, ideas, and professional opinions in writing to patients and their families.
- TC ____ Plan for the integration of patient needs with family needs.
- CC ____ Function calmly and competently in emergency situations.
- L ____ Remain open to the suggestions of those under your direction and use them when appropriate.
- IPR ____ Use opportunities for patient teaching when they arise.

Performance of Professional Development Behaviors

Instructions: Using the following key, please indicate on the line at the left of each item the number that best describes the frequency with which you engage in the following behaviors.

Key: 1 - Seldom or never
2 - Occasionally
3 - Frequently
4 - Consistently

- PD ____ Use learning opportunities for on-going personal and professional growth.
- PD ____ Display self-direction.
- PD ____ Accept responsibility for own actions
- PD ____ Assume new responsibilities within the limits of capabilities.

- PD ____ Maintain high standards of self-performance.
- PD ____ Demonstrate self-confidence.
- PD ____ Display a generally positive attitude.
- PD ____ Demonstrate knowledge of the legal boundaries of nursing.
- PD ____ Demonstrate knowledge of the ethics of nursing.
- PD ____ Accept and use constructive criticism.

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Appendix D Self-Anchoring Striving Scale

This is a picture of a ladder. The top of the ladder represents the best possible health and the bottom of the ladder the worst possible health. Where would you place your own present state of health on the ladder? Circle the number for your response.

10 best possible health

9

8

7

6

5

4

3

2

1 worst possible health

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Appendix E
Demographic Form
Demographic Information

1. Identification number _____
2. Age:
 1. Under 18 years
 2. 18-22 years
 3. 23-27 years
 4. 28-32 years
 5. 33-37 years
 6. 38-42
 7. 43-47
 8. 48-52
 9. Over 52 years
3. Current level in college:
 1. Freshman
 2. Soph.
 3. Junior
 4. Senior
4. Current level in nursing program:
 1. Junior
 2. Senior
5. Credit Load for this semester:
 1. less than 6 credits
 2. 6-8 credits
 3. 9-12 credits
 4. More than 12 credits
6. Sex:
 1. Female
 2. Male
7. Marital Status:
 1. Single
 2. Married
 3. Divorced
 4. Separated
 5. Living with significant other
8. Number of adult children (over 21) living in household:
 1. none
 2. one
 3. two
 4. three
 5. more than three
9. Number of children (under 6 years) living in household:
 1. none
 2. one
 3. two
 4. three
 5. more than three

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10. Number of children (6 - 21 years) living in household:
- | | |
|---------|--------------------|
| 1. none | 4. three |
| 2. one | 5. more than three |
| 3. two | |
11. Number of adults living in household - other than you:
- | | |
|---------|--------------------|
| 1. none | 4. three |
| 2. one | 5. more than three |
| 3. two | |
12. Relationship of above (circle as many as appropriate):
- | | |
|------------|---------------------|
| 1. husband | 5. friend |
| 2. wife | 6. your adult child |
| 3. mother | 7. other relative |
| 4. father | |
13. Total number of hours per week you are currently employed while attending college:
- | | |
|----------------|------------------------|
| 1. less than 6 | 5. 25-30 |
| 2. 6-12 | 6. 31-35 hours or more |
| 3. 13-18 | 7. 36 or more |
| 4. 19-24 | 8. not working |
14. Do you have significant care giving responsibilities to another individual?
- | | |
|--------|-------|
| 1. yes | 2. no |
|--------|-------|
15. Cumulative grade point average last semester
-
16. Grade you anticipate in this course (circle one)
- A B C D
17. If you have a nursing role model(s), please describe.

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Appendix F

"Your Own Thoughts"

1. Describe your relationship with your clinical instructor(s) for this course.
2. What factors have helped or hindered your progress in this course?
3. In the clinical area, what do you think are the main things on which you were evaluated?
4. If anything unusual has happened during the semester that you feel may have affected your clinical performance, please describe?

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Appendix G

Self-Anchoring Self-Esteem Scale

Below is a picture of a ladder. The top of the ladder represents high self-esteem and the bottom of the ladder low self-esteem. Where would you place your own present state of self-esteem? Circle the number for your response.

<u>10</u>	best possible self-esteem
<u>9</u>	
<u>8</u>	
<u>7</u>	
<u>6</u>	
<u>5</u>	
<u>4</u>	
<u>3</u>	
<u>2</u>	
<u>1</u>	worst possible self-esteem

Role Mastery

VITA

Angela F. Wood was born in Knoxville, Tennessee on September 29, 1956. She attended schools in the public system of Blount County, Tennessee, where she graduated from Everett High School in June, 1974. She graduated from the University of Tennessee, Knoxville in 1979 with a Bachelor of Science in Nursing. While working in the Intensive Care Nursery she returned to school at the University of Tennessee, Knoxville and graduated in 1989 with a Master of Science in Nursing with role preparation in nursing education. From 1989 to 1993, Angela coordinated the East Tennessee Regional Perinatal Program. In 1993, she began teaching in the Nursing Division at Carson-Newman College in Jefferson City, Tennessee and also began her pursuit of Doctoral education. The doctoral degree was received May, 1998.

She is currently teaching in both the Undergraduate and Graduate Nursing Programs at Carson-Newman College.