

**THE EARLY SOCIALIZATION PROCESS OF CRITICAL CARE NURSES:
IMPLICATIONS FOR ADMINISTRATION, EDUCATION, AND PRACTICE**

Deanna L. Reising

**Submitted to the faculty of the University Graduate School
in partial fulfillment of the requirements
for the degree
Doctor of Philosophy
in the School of Nursing,
Indiana University**

July, 1999

Accepted by the Graduate Faculty, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy



Sharon L. Sims, PhD, RN, Chairperson



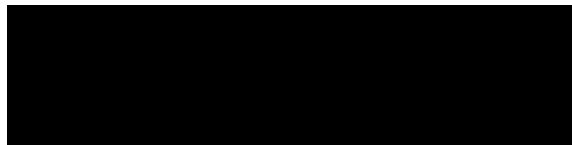
Mary L. Fisher, PhD, RN

Doctoral
Committee



Anna M. McDaniel, DNS, RN

May 4, 1999



Richard Bauman, PhD

© 1999

Deanna L. Reising

ALL RIGHTS RESERVED

DEDICATION

To my husband, Christopher, and my children, Niki and Willie, who were constant reminders of what is really important in life. They supported me through this entire process, and pulled me away from it when I needed to be pulled away the most.

To my mother, Carol Yeley, who has always provided endless support to me, and has given my children a fun and loving environment when they have had to be away from their parents.

Finally, in memoriam of and dedication to my grandmother, grandfather, and uncle who always stood behind me and took great pleasure in my achievements, but were unable to see this one all the way through.

ACKNOWLEDGMENTS

Like most “older” female doctoral nursing students, my doctoral program lasted seven years. Over this time, I have enjoyed the support from many people who have helped me achieve the status of “Doctor.”

- ◆ Foremost, the participants in the study who gave hours of their time to improve the future socialization of critical care nurses;
- ◆ Nurse administrators and educators in Bloomington Hospital, Columbus Regional Hospital, Methodist Hospital, and Wishard Hospital, who went the extra mile in the recruitment of such wonderful participants;
- ◆ Dr. Sharon L. Sims, my doctoral chair, for whom I am greatly appreciative of for guiding me through the seemingly uncharted waters of qualitative nursing research in Indiana;
- ◆ Dr. Mary L. Fisher, my PhD major advisor, who graciously assumed the mentor role for me when I entered the “new” PhD program and whose advice to “let go of the dissertation” allowed me to graduate this year and not some other year;
- ◆ Dr. Anna McDaniel, my DNS advisor, who adeptly guided me through the point of finishing my DNS coursework.
- ◆ Dr. Richard Bauman, my minor advisor, who allowed me to explore semiotics in a manner relevant to my area of interest and who introduced me to field which was full of lively, liberally educated folklorists;

- ◆ **My director, mentor, colleague, and friend, Dr. Joyce S. Krothe, who supported me not only through changes in work assignments, but through her unrelenting support of my family in emotionally tough times;**
- ◆ **To my colleagues and friends, Dr. Patricia Greer and Lynn Devich, who formally and informally pinch hit in order for me to finish this degree and who have also been good friends to my children;**
- ◆ **Dr. Angela Barron McBride, who supported me administratively through my changes in student and faculty status, and who is a role model for women everywhere; and**
- ◆ **The intensive care nurses at St. Mary Medical Center in Hobart, Indiana, who made me the critical care nurse I am today.**

PREFACE

Critical care nursing is an exciting and challenging field. People often wonder why one would go into this type of nursing, especially when critical care is thought of as the place people “go to die.” Yet, critical care nurses are among the most respected health care professionals. Nursing is a noble, caring profession, deeply esteemed by the public, but not well paid when one considers the scope of responsibility.

Health care has changed to “quality patient outcomes” and “patient focused care.” My husband and I often joke and wonder, “How could health care be anything *but* patient focused? What was it before if it wasn’t patient focused?” We ought to really stop and think about the messages we are sending to the public.

This preface is my opportunity to call upon executives and nurse leaders in health care facilities, to remind you, very seriously, that we do not achieve “quality patient outcomes” without “quality time” from “quality nurses.” How many studies will it take to convince you of the value of nursing care? Some say we have not demonstrated the value of nursing—nonsense! If you ask former patients who have received nursing care, they adeptly and passionately describe the significance of nursing care: They also know when they have suffered because of staffing cuts to nursing—some of the sufferings are minor, others are deadly, many we never realize because the patient cannot tell us.

I am often reminded of a management student I had who told me that he would make a good manager because he wasn't afraid to cut staff. From where did he get this notion of a good manager? It certainly wasn't from me. A whole semester had gone by and in this final conference, this is what he told me he learned. In my eyes, a good manager is one who can deliver high quality patient care, have a relatively satisfied staff, and still maintain the bottom line. I challenged him to become that manager--and I challenge all nursing managers to do the same. No administrative position is so wonderful that we should sell out our profession, and our patients.

Deanna L. Reising

April, 1999

Deanna L. Reising

**THE EARLY SOCIALIZATION PROCESS OF CRITICAL CARE NURSES:
IMPLICATIONS FOR ADMINISTRATION, EDUCATION, AND PRACTICE**

Critical care nurses provide care to the most ill patients in hospital settings; yet, little is known about the processes by which critical care nurses are socialized into their roles. The purpose of this study was to uncover the early socialization process for newly hired nurses in adult critical care settings. The two research questions for this study were: 1) What are the early processes of how a new nurse becomes a critical care nurse? 2) From the participants' views, what factors play a part in the socialization process for new critical care nurses? Grounded theory methodology was used to collect and analyze data; trustworthiness criteria were met. Findings indicate participants negotiate each phase of their socialization process in which they must discover the expectations for each new challenge. The theory describes participants as they are "Navigating the Challenge." The first phase, "The Prodrome," contains the categories "Why I Am Here," and "Up for the Challenge." The second phase is "Welcome to the Unit" with the category "Being Nurtured." The link to the next

category was “Disengagement/Testing,” consisting of the categories of “Cutting It, and “Why Am I Here?” and “Taking Charge.” Participants who were successful in “Putting It Together” in the “On My Own” phase were able to successfully complete the early socialization processes and enter the “Reconciliation” phase. Implications are made for administration, education, and practice.

Sharon L. Sims, PhD, RN, Chairperson

Mary L. Fisher, PhD, RN

Anna M. McDaniel, DNS, RN

Richard Bauman, PhD

TABLE OF CONTENTS

Chapter	Page
1. INTRODUCTION.	1
Specific Aims and Research Questions	2
2. METHODOLOGY.	4
Design	4
Symbolic Interactionism	5
Design Components	6
The Role of Theory	9
The Role of Existing Literature	9
Rigor in Qualitative Research	11
The Role of the Researcher	13
Institutional Review Procurement	17
Method	20
Participants	20
Data Collection	25
Data Analysis	38
Illustrations and Examples of Data Analysis Techniques	45
3. CULTURAL CONTEXT.	52
Unit Layout and Structure of Nursing Care	52
Interactions	53
The Mystical Critical Care	57
Relevance of Cultural Context	58
4. RESULTS OF RESEARCH QUESTION #1	60
The Process	60
The Prodrome	60
Welcome to the Unit	67
Disengagement/Testing	69
On My Own	79
Reconciliation	85
Am I a Critical Care Nurse?	87
5. NAVIGATING THE CHALLENGE	90
Navigating	90
The Composite Experience	92
Am I a Critical Care Nurse?	95

6.	RESULTS OF RESEARCH QUESTION #2	98
	Uncovering the Keys to Success	98
	Looking for Good Preceptors	98
	Determination	99
7.	IMPLICATIONS AND DISCUSSION	102
	Administrative Implications	102
	Educational Implications	110
	Practice Implications	121
	Theoretical Implications	125
	Culture	135
	Methodological Implications	137
	Significance	140
	Recommendations for Future Study	141
8.	GUIDELINES FOR CRITICAL CARE ORIENTATION	143
	Structure	143
	Preceptors	144
	New Graduate Nurses	147
	Stress Reduction	148
9.	CONCLUSION	151
	REFERENCES	153
	APPENDIXES	
	Appendix A: Institutional Support Statements	162
	Appendix B: Institutional Review Board Approval	168
	Appendix C: Informed Consent/Participants	170
	Appendix D: Informed Consent/Preceptors	172
	Appendix E: Full Text Quotes	174

LIST OF TABLES AND FIGURES

Table		Page
Table 1	Demographic Characteristics of Participants	24
Table 2	Time Table for Study	26
Table 3	Design Study Flow for Interviews and Journals	28
Table 4	Trustworthiness Criteria and Evidence	44
Table 5	Summary of Design and Components	51
Table 6	Recommendations for Future Investigations	142

Figure		Page
Figure 1	Category Evolvement of “Putting it Together” –Precursor Events	46
Figure 2	Category Evolvement of “Putting it Together” –Intermediary Events	47
Figure 3	Components of Category “Putting it Together”	48
Figure 4	Parameters of the Category “Why I Am Here”	65
Figure 5	Parameters of the Category “Up for the Challenge”	66
Figure 6	Parameters of the Category “Being Nurtured”	69
Figure 7	Parameters of the Category “Cutting It”	74
Figure 8	Parameters of the Category “Why Am I Here?”	76
Figure 9	Parameters of the Category “Taking Charge”	78
Figure 10	Comparison of Categories “Cutting It” and “Putting it Together”	84
Figure 11	Parameters of the Category “Reconciliation”	87
Figure 12	Sample Codes for Core Categories and Links	89
Figure 13	Navigating the Challenge	97
Figure 14	Orientation Events during the Socialization Process	150

CHAPTER 1: INTRODUCTION

Critical care nurses are challenged with providing care to the most ill patients in hospital settings; yet, little is known about the processes by which critical care nurses are socialized into their roles. Critical care nurse managers face two important issues related to the early socialization processes of critical care nurses: 1) how to facilitate the socialization of newly hired critical care nurses into their roles for the purposes of retention, and 2) how to facilitate the socialization of newly hired critical care nurses into their roles in order to provide competent patient care to an acutely ill population. Critical care nurse managers, as well as other nurse managers, struggle to identify during the interview and hiring process, which applicants would most likely develop into competent, even stellar, critical care nurses. Nurse managers are greatly concerned about the level of patient care given by staff, but they are also concerned about the cost of orientation. Specialty orientations, such as that for critical care nurses, are well documented in the literature, including studies from this investigator, as costing between \$3000 and \$10,000 per new nurse (Cardona & Bernreuter, 1996; Mooney, Diver, & Schnackel, 1988; Reising, 1997; Reising, 1994). Inadequate or poorly facilitated socialization processes have been linked to impaired recruitment and poor retention rates (Reising, 1997) escalating the orientation costs and causing budgets to shatter. Critical care nurse managers and educators would benefit from research which may assist them in the selection of new critical care nurses and facilitation of role socialization of new nurses.

In times of nursing shortages, particular issues come to the forefront. For critical care nursing, shortages become opportunities for new graduate nurses aspiring to careers in critical care nursing. The questions soon became “Should new graduate nurses enter critical care settings?” and “Can new graduate nurses be successful in critical care settings?” Before those questions had an opportunity to be answered, new graduate nurses were becoming successfully socialized as critical care nurses.

Though one might still consider the success level of new graduates in comparison with experienced nurses for the purposes of determining which to hire, the practice of using new graduate nurses to fill vacancies in critical care units will continue to occur because of the cyclical nature of critical nursing shortages. It is more useful, therefore, to investigate the socialization process for new critical care nurses in general, with the intention of producing quality critical care nurses regardless of prior nursing experience.

Specific Aims and Research Questions

Two research questions guided this inquiry: 1) What are the early processes of how a new nurse becomes a critical care nurse? 2) From the participants' views, what factors play a part in the socialization process for new critical care nurses? The nature of the research questions requires an inductive methodological approach. The investigator must collect data, analyze data, and contextualize data, in order to answer research questions.

The outcome for this study is to develop a theory on how critical care nurses are socialized. This theory, having clarified and identified the

socialization process, will serve to provide a framework for developing critical care orientations and facilitate socialization of critical care nurses based on empirical data. From this study, relevant evaluation criteria for critical care orientation programs may be developed to determine the extent to which critical care orientation programs are successful. In addition, groundwork will be laid for future studies to be conducted on enhancing critical care nurse retention. Finally, appropriate research questions may be generated concerning selection criteria for critical care nurses and the criteria's effects on critical care nurse retention as well as direct client care.

CHAPTER 2: METHODOLOGY

This section describes the process and methodology used to guide the inquiry into how critical care nurses are socialized. Research design, protection of participants, participant selection, data collection, and data analysis are detailed.

Design

Grounded theory methodology was used to design the research process from participant selection, to data collection, to data analysis. Grounded theory was “discovered” by Glaser & Strauss (1967), and is underpinned by the theoretical framework of symbolic interactionism as formally described by Blumer (1969). Grounded theory methodology provides a technique for inductive reasoning through constant comparative analysis for the purposes of uncovering a basic social process (Glaser & Strauss, 1967; Glaser, 1992). Because the research questions for this study search for a process of socialization, grounded theory methodology is the appropriate technique for data collection and data analysis.

The goal of grounded theory methodology is to produce a substantive, local theory (Glaser & Strauss, 1967). In this case, the substantive area is critical care nursing and its locality is central and south-central Indiana adult critical care nurses. A local, substantive theory may evolve into a formal theory which may be inclusive of “one area” or “multi areas” and which may result in hypotheses that can be tested across populations (Glaser & Strauss, 1967). An example of how this study might unfold into a “one-area” formal theory is if the

research were found to be applicable to the socialization processes of nurses or health care providers. Further, if the research was used to enhance socialization processes of all new employees regardless of their work area, then a “multi-area” formal theory has been generated.

The intent of this study is to isolate the socialization experiences for new critical care nurses and does not inherently carry the goal of illuminating socialization processes for humankind. However, the theory produced from this investigation may lend support to other socialization processes, or may spark further questions for the study of socialization processes outside of the nursing field.

Symbolic Interactionism

The main tenet of symbolic interactionism is that social behavior is learned through interactions with the self and others (Blumer, 1969). There are three fundamental principles that guide the symbolic interactionism framework:

1. Humans act on things based on the meanings ascribed to them.
2. Social interactions that one has with one’s fellows give rise to meanings of things to an individual.
3. The interpretation process involved communication with self in order to ascribe meaning in the context of the situation (Blumer, 1969).

In addition, there are six “root images” which Blumer (1969) describes as extensions of the first three premises:

1. Human beings engaging in action comprise human groups.

2. Life can only exist with interaction between and among group members.
3. Objects are direct products of symbolic interaction.
4. Individuals respond to others and themselves.
5. Individuals construct their own actions and release them at the proper time.
6. Links with other groups are made through individuals whose group memberships extend beyond the local group.

Inherent in symbolic interactionism is a sociological process—a process which is uncovered by grounded theory methodology (Glaser & Strauss, 1967). The relevance of symbolic interactionism to this study is that of unmasking the socialization process of critical care nurses as they are living the process.

Design Components

The purpose of this section is to describe the guidelines for implementing a grounded theory project. Following this section, each component will be detailed.

Participants. When investigators conceive of participants in a quantitative, deductive paradigm, one of the main concerns is “How many participants will I need?” In a quantitative framework, the number of participants is of great importance in order to achieve sufficient power analysis. In addition, participants must be screened for any extraneous variables that might cause misleading results. However, in a qualitative, inductive inquiry, participants are chosen based on the richness of results they might provide. This does not mean that

any participant will do, but it does mean participants are chosen based on their ability to provide data relevant to the research questions posed.

Authorities are consistent about the parameters by which the number of participants for a grounded theory investigation is required. Unfortunately, the investigator is given little guidance in the pre investigatory stage as to what that number might be. The parameters for the number of participants are, as most parameters in grounded theory process are, within the judgement of the investigator and entirely dependent on the types of data generated by previous data collection efforts. The criterion for determining how many participants any one study will require is that of data redundancy (Chenitz & Swanson, 1986; Glaser & Strauss, 1967; Sandelowski, 1995a; Stern, 1985, 1980). In fact, the investigator may be forced to estimate a number of participants needed for one purpose or another (e. g. Institutional Review Board approval), only to find that number does not match the number actually required for the inquiry.

This discussion is not to make light of participant numbers in qualitative research. Sandelowski (1995a) addressed the issue of "sample size" in qualitative methodologies. According to Sandelowski (1995a, 1995b), the sample size is dependent also on the type of inquiry. For example, one case might be sufficient for a case study approach when trying to uncover a phenomenon for the purposes of detailing events and a process for that case, but, a larger sample is needed to develop a theory and provide for some generalization of the theory. Chenitz & Swanson (1986), Morse (1994), and Sandelowski (1995a), counsel the investigator to consider between 20-50 interviews/observations with

a grounded theory study. Even with each of the above authors' recommendations, it is acknowledged that the number of *participants* is not the issue, but the number of *data/observations* that is important.

Finally, the number of participants and/or observations is difficult to determine *a priori* due to the nature of theoretical sampling built into the grounded theory process. Once data collection has begun, the investigator initiates concurrent analysis. Initial data analysis steers the investigator into sampling to support or dispute any hypotheses or theoretical notions garnered in earlier data analyses. Hence, closure of data collection is totally dependent upon the determination of a satisfactorily complete data analysis (Glaser & Strauss, 1967; Stern, 1985, 1980).

Other data sources. One of the major benefits to using grounded theory methodology is the flexibility of allowing for multiple data sources (Glaser & Strauss, 1967). Multiple data sources allow the investigator to examine the full scope and emotional impact of the story or stories being told (Keddy, Sims, & Stern, 1996). Examples of types of data that may be useful depending on the investigation are: interviews, field observation, historical documents, and organizational documents (Glaser & Strauss, 1967). Glaser & Strauss (1967) conceive these types of data fitting into two categories—field and documentary—and charge investigators with considering the benefits of both when planning an inquiry.

The Role of Theory

Quantitative investigations typically consist of testing theory, which assumes that the theory already exists. The hallmark of grounded theory methodology, however, is the generation of theory from data grounded in observation. The distinction between the two methods is an important one: Nursing knowledge is derived from *both* the generation of and testing of theory (Mitchell & Cody, 1993).

Because the focus of grounded theory methodology is not to test hypotheses derived from an existing theory, the need for a guiding theoretical framework for these purposes is unnecessary. This is not to say that grounded theory is atheoretical. Indeed, the foundation of the methodology lies in the symbolic interactionism framework as described in a previous section. In the case of grounded theory methodology, however, the theoretical framework is the *context* for the study, and not the content.

The Role of Existing Literature

Many grounded theory researchers agree that exhaustive literature searches before data collection are inappropriate for grounded theory design. Literature searches may lead the investigator to come to premature closure concerning the data which could lead to an inaccurate analysis and interpretation of data (Glaser & Strauss, 1967; Stern, 1985). Stern (1985) further argues against using previous data or research materials because they may be inaccurate themselves.

To expect an investigator to be wholly uninformed about the research area is not appropriate, nor possible. The investigator chooses an area of investigation because of interest in the phenomenon, and/or experience with the phenomenon. In many cases, the investigator may be familiar enough with existing research that notions about the phenomenon may have already begun to develop. In addition, it may be advantageous for the investigator to consult the literature with the goal of gaining a focus to study the phenomenon (Streubert & Carpenter, 1995).

The challenge to the investigator is to be knowledgeable enough about the phenomenon, without entering the research process with preset conditions of what to expect in the results of the study. Because the major problem of performing an exhaustive literature search up front creates the concern for bias and inaccurate analysis, issues of research credibility surface. Credibility is thoroughly discussed in a later section of this report.

The appropriate use of literature in grounded theory methodology comes not before data collection, but rather, during data analysis. Stern (1980) places the literature search during the concept development phase of the analysis and labels it "a selective sample of the literature" (p. 22). In this phase, the literature is consulted, compared, and contrasted with the investigator's data and may be used as data (Glaser & Strauss, 1967; Stern, 1980).

One of the most important roles of the literature in a grounded theory study is the comparison of the investigator's findings to that of prior findings. This is an especially important phase of data analysis that should occur after

research findings are presented. In this phase, the investigator is charged with relating the implications of the research to existing research in the area by: 1) comparing and contrasting results, 2) providing explanations for any differences in results, and 3) providing guidance on future areas of research to further explore the phenomenon (Streubert & Carpenter, 1995). It is through this process that nursing knowledge is advanced.

Rigor in Qualitative Research

Trustworthiness. Demonstration of trustworthiness is the method by which rigor is evidenced in qualitative research (Streubert & Carpenter, 1995). To support a claim of trustworthiness, the investigator's toolbox consists of the following equipment: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). For a full description of the terms and the evolution of these terms, the reader is referred to the chapter entitled "Establishing Trustworthiness" in Lincoln & Guba (1985); a more pointed description of the terms is provided here.

Credibility. Credibility is perhaps the most frequent tool used by qualitative investigators to establish rigor. Glaser & Strauss (1967) introduce the notion and context for credibility, but it is Lincoln & Guba (1985) who provide the richest description and guidance for the investigator. Lincoln & Guba (1985) link credibility to "truth value," which is defined as how well the investigator's representation of the process matches the multiple realities uncovered in the investigation. Credibility may be demonstrated by: 1) prolonged engagement with the phenomenon, 2) persistent observation, 3) triangulation of different data

sources and different data collection modes, 4) peer debriefing, 5) negative case analysis, 6) referential adequacy, and 7) confirmation of results with participants (also referred to as “member checks”) (Lincoln & Guba, 1985; Streubert & Carpenter, 1995).

Transferability. Transferability denotes the applicability of the research to others in similar situations (Lincoln & Guba, 1985; Streubert & Carpenter, 1995). While authors of qualitative research reports may describe the scope of applicability of research findings, the ultimate responsibility for determining applicability lies with the potential user of the research (Lincoln & Guba, 1985). In some cases, the author may choose to provide the potential reader guidance on situations where the findings should not be used. The author’s duty, however, is to provide the reader with enough context and information so the potential user can more accurately gauge whether the research findings are useful in any particular situation (Lincoln & Guba, 1985).

Dependability. A study is deemed dependable if credibility requirements are met and refers to the ability of the data to yield similar results under similar circumstances. Though Lincoln & Guba (1985) make the case that separate procedures are not needed if credibility is met, they acknowledge this argument to be weak. Techniques are suggested for supporting the claim of dependability with the most frequent approach being the inquiry audit (Lincoln & Guba, 1985). The inquiry audit consists of an examination of the inquiry process by someone other than the investigator and is used to assure that the investigator was true to

the methodology (Lincoln & Guba, 1985). This process necessitates that the investigator keep detailed notes of the process.

Confirmability. The last criterion for trustworthiness is confirmability. Confirmability is established if the product (theory) is found to be supported by the data (Lincoln & Guba, 1985; Streubert & Carpenter, 1995). Once again, the audit procedure is used, but is focused on identifying the trail of documents and notes showing how the investigator achieved the particular results being purported. Lincoln & Guba (1985) distinguish the audit of the process to relate to dependability, while the audit of the product to pertain to confirmability. As the methodology for this investigation is unveiled, the strategies employed to establish trustworthiness are described.

The Role of the Researcher

One of the most distinguishing features in a qualitative design is the role of the researcher. While the investigator is to remain “distant” from the data collection and use reliable tools in quantitative designs, the investigator *is* the tool in qualitative designs. The intimate connection between the investigator and data collection is the crux of qualitative research and is viewed as beneficial, rather than problematic. This relationship, however, is too substantial to be passed over by one or two statements. In qualitative research, the investigator’s background and personal beliefs are important. I have examined my own philosophy on life in a doctoral class, and my mentors strongly encouraged me to examine my personal beliefs related to this investigation. The personal belief statement and my reflection of my own thoughts during this study aided me in

keeping my beliefs, and my data in perspective. This procedure is often referred to as bracketing (Streubert & Carpenter, 1995). It is here that my background and personal beliefs are offered and I have chosen to present them in first person.

Relevant background. I am a 34-year-old white female born and reared in central Indiana. I was brought up in a conservative, Republican family of the “traditional” mother/father parent structure. I am five years older than my only sibling, Eric, who is a Podiatrist. I attended local schools and my graduating class was 151 students.

I attended Indiana University, in both Bloomington and Indianapolis, for four years to earn my Bachelor of Science in Nursing (B. S. N.) in 1986. Those college years represented an incredible transition for me. The most significant changes are that I became a liberal, a feminist, and a Democrat, though I suspected it was only a matter of time before that occurred. The only times I worked during that period were summers, and a semester nurse internship program on a cancer gynecology unit at University Hospital in Indianapolis, Indiana. The nurse internship experience was invaluable in terms of experience with young, dying women. To this day, I am scared to death for my own health because of what I experienced in caring for these women.

It also became apparent to me that I wanted to teach at some point in my career, and one of my most striking thoughts was that if some of my teachers could earn doctoral degrees and be professors, so could I. At the end of my program, I married, moved to Gary, Indiana and began my nursing career on a

medical-surgical unit in Hobart, Indiana. It was a strong unit in terms of nursing care, as I came to find out from later experiences. I began my master's degree to become a Clinical Nurse Specialist through Purdue University-Calumet one year out of my bachelor's program.

After two and one-half years on the medical-surgical unit, I had the urge for a new challenge and my nurse manager was supportive of my desire to further develop myself. My options were a management position that was offered to me, or critical care. I chose critical care in the same institution, a decision I never regretted. I worked with the most knowledgeable staff I have ever come across in my 13 years as a nurse. Though I only worked critical care for a year, I took every experience, including others' experiences, for their full value making my experience worth much more than "one year."

During that time, I also finished my master's and began teaching a clinical group for Indiana University Northwest. Two weeks after earning my master's degree, I had my first child, resigned critical care, and chose to teach one clinical group. After that, I chose to continue teaching in a fuller capacity and take a part-time position as an Assistant Director of Nursing at a Gary hospital. I was the house supervisor for the 7:00 p.m. to 7:00 a.m. shift, mainly weekends. This was an incredible experience: It was irreplaceable. Though I enjoyed the administrative aspects, I found myself, in a rare spare moment, still "hanging out" in the critical care units, and the emergency room.

After one year, my family moved to Bloomington, Indiana for my husband to pursue a master's degree. I began to work as a full time faculty member and

pursue my doctorate. I have experienced a fair amount of change, mostly well tolerated, and significant illness of my children, obviously less well tolerated. One thing that has not changed for me is my fascination with nurses entering a critical care unit. I am now ten years beyond my own entry into critical care: some experiences have greatly faded, others remain very vivid.

Personal statement. I believe that research questions should drive methodology. In this respect, questions that ask how or why, or ask about human behavior, are best answered by inductive inquiry. I believe that inductive inquiry is as powerful and, in many cases, more powerful than quantitative methods when behavioral questions are posed. Because of my beliefs, grounded theory, with its underlying framework of symbolic interactionism, best fits me. It would be no surprise, then, that I tend to ask how and why questions, which focus on human behavior.

I also have some assumptions about this study, "The Socialization of Critical Care Nurses." First, I assume that there is a process underlying a critical care nurse's transformation. This assumption comes, somewhat, from my own experiences in critical care, but more from observations of others as they struggled to become critical care nurses. Second, I think that this process is unique to critical care. While I think there is a socialization process to many different specialities, and they are all unique as well, critical care is the area that most fascinates me. I gravitate toward investigations involving critical care management, critical care nurses, and critical care patients.

The inclusion of preceptors in my study reveals my assumption about the importance of a preceptor. In my experience, some nurses attribute their lack of success solely to their preceptor. So, if preceptors might play a part in socialization, what else could? Hopefully, this investigation will provide insight on these issues.

I did not know, specifically, what would come out of this study—I had no idea what the theory would look like. However, I knew that regardless of the results, it would be a contribution well worth the time and effort, arming us with the information we need to improve the well being of the nurse which, and here is another assumption, will inevitably lead to better patient care.

Institutional Review Procurement

Institutional review for the purposes of participant protection was pursued on two levels: The individual institutional/facility level and the university level. Participant protection processes for institutional review at both levels are delineated below.

Participant Protection

Measures to ensure participant protection were initiated at each step of the study from selection processes to data storage mechanisms. There are two essential areas for risk to the participant: Consequences of choosing to or not to participate in the study and individual identification of data sources.

Though unit managers for each critical care unit gave their approval to refer new nurses to the study, the investigator requested that the nurse educator for the unit serve as the contact person in securing participants. From the

investigator's perspective, the risk of repercussions resulting from whether a particular nurse chose to participate in the study seems minimal; however, the unit manager is recognized as the formal evaluator and authoritarian figure for the nurse. Thus, the participant may view the unit manager's request to participate in a study as more than a request, but as a coercive requisite for remaining employed in the manager's unit.

Individual links to data could occur at multiple points in the study posing a potential risk to participants. Participants were assured confidentiality of their individual comments by the investigator as stated in the informed consent.

Below are the measures taken at each step to ensure participant protection:

1. Audio tapes were transcribed either by the investigator or professional transcriptionists, being instructed on the confidentiality of the material.
2. Participants were assigned code numbers to protect the participants from being known when the investigator's mentors reviewed data.
3. Data, including audiotapes, transcripts, floppy disks, and early versions of data analysis were secured in a locked file cabinet in the investigator's locked office.
4. Data stored on the investigator's computer were protected by a computer password and the computer is in the investigator's locked office.
5. Written reports, such as this one, used group data for results. Where individual quotes are used, they are used as exemplars of the content being described, and do not identify any one particular participant.

6. Audiotapes were either destroyed or returned to participants via registered mail.

Individual Institutional/Facility Review

Initially, five target facilities were contacted in central and south-central Indiana. Facility selection is described below. The chief nursing officer of each facility was contacted about the possibility of participating in the study. The chief nursing officer was also asked about individual institutional review procedures requirements and were asked to provide a letter of support for university Institutional Review Board (IRB) purposes. In all cases, the chief nursing officers agreed that nursing would be able to give the approval for the study. This approval process was carried out in a variety of ways: 1) The chief nursing officer gave approval and signed the letter of support, 2) the approval was delegated to the unit manager who signed the letter of support, and/or 3) the approval was delegated to a patient care committee comprising nurses who provided a review/approval process for the proposed study. All letters of institutional support were secured by January 1998 (see Appendix A)

University Review

The research proposal was submitted under the direction of the investigator's dissertation chair as an expedited review through Indiana University-Purdue University at Indianapolis IRB. The proposal, consent forms, and institutional letters of support were submitted as evidence of sufficient and necessary participant protection. Approval from IRB was obtained on February 9, 1998 (see Appendix B).

Participants signed an informed consent form and were given a copy of the signed form for their records. Consent forms varied for new nurse participants versus preceptors due to the difference in the type and level of participation required for the study. The consent forms for new nurse participants and preceptors are provided in Appendices C and D respectively.

Method

The process and methods employed for this investigation are described in this section. Participant recruitment and selection, data sources, data collection techniques, and the data analysis procedure are detailed. An example of the analysis process for the initial states of the process is supplied. Table 5, at the end of this section, provides a summary of the design components for the study.

Participants

Consistent with the principles of grounded theory methodology, participants were recruited from a variety of adult critical care settings in central and south-central Indiana. Potential units were selected based on their willingness to participate, and their ability to recruit an adequate number of potential participants. Additionally, because of the intense nature of data collection procedures for this investigation, only facilities within a two-hour drive of the investigator's home were considered.

Inclusion criteria. The following criteria were necessary for the purposes of investigating the phenomenon in question. The participant must be:

1. A Registered Nurse.
2. A new nurse to the critical care area.

3. Entering an adult critical care unit.
4. Entering adult critical care for the first time.
5. Within the first month of orientation to critical care.

Participants, of course, could voluntarily withdraw from the study, though none chose to withdraw. Three participants were removed from the study after termination with their units.

Two specific issues arose during the course of the study requiring the investigator's judgement on inclusion. The first issue was whether nurses being cross-trained to other areas, particularly "step-down" units would be considered for the study. This situation arose in two institutions primarily because of redesign initiatives. After careful consideration about the goals of the study, the investigator made the decision to include these participants because they still met the inclusion criteria and were thought to be able to yield data related to the research questions at hand.

The second issue concerned one nurse who started in a critical care area, then transferred in the first month to the emergency department. Though the emergency department could be considered a critical care area, it is the investigator's belief that the socialization process within an emergency department could significantly differ from that of traditional adult critical care areas, and thus compromise results of the study. This participant was withdrawn from the study, though data from participant's earlier experiences in critical care were used in the findings due to their relevance.

Recruitment procedures. After appropriate institutional agreements were obtained, unit managers designated a contact person with whom the investigator could coordinate recruitment. In all cases, either the unit nurse educator, or the facility educator served as the contact person for the investigation. The contact person could initiate the call to the investigator as potential participants became known, or the investigator would phone the contact person to determine whether any potential participants were available. Once the contact person described the potential participant and the determination of inclusion criteria was met, the contact person asked potential participants if the investigator could call them at home. If this was approved, as was in all cases, the investigator phoned the potential participant, explained the study, clarified inclusion criteria, gained verbal consent, and set an appointment for the first interview. From that point, all contact occurred between the investigator and the participant.

In two instances, the investigator was invited to a critical care orientation to recruit participants. In these cases, the investigator explained the study, asked for interest in participation, and gave her business card to those who did not denote interest immediately. Recruits who indicated interest on the spot gave the investigator their home phone numbers and contact was then continued through the participant and the investigator. All recruits who did not indicate initial interest chose not to call the investigator.

Final participant pool. Consistent with grounded theory design, participant recruitment continued until category saturation occurred. Saturation will be

further explained in the analysis section of this report. In all, there were ten participants:

1. Seven participants completed the study in full.
2. Two participants terminated their positions at approximately mid-study.
3. One participant transferred to the emergency department after one interview.

None of the participants who met inclusion criteria withdrew from the study. This accounts for a 100% retention rate of qualified participants. Table 1 lists the demographic characteristics of the participants for reference.

Table 1

Demographic Characteristics of Participants*

Age	Early 20's to late 40's
Gender	8 females 2 males
Ethnic Background	White Asian-American
Years of Nursing Experience	New Graduate=2 1-5 years=7 More than 20 years=1
Current Nursing Area	Cardiovascular Critical Care=4 General Critical Care=4 Neurological Critical Care=1 Cardiac Critical Care=1
Range of Nursing Experience	Home health nursing=4 Medical-surgical=3 Intermediate critical care nursing=2 Psychiatric nursing=2 Obstetrical nursing=1 Pediatric nursing=1 Neonatal nursing=1 Occupational health nursing=1 Traveling nurse=1 Bone marrow unit=1 Rehabilitation nursing=1 (5 participants had more than 1 area of experience)

*10 participants represented

Preceptors/Educators. Preceptors and facility nurse educators of participants are assumed by the investigator to be a key component and were included as potential participants for the purposes of institutional review. The purpose of preceptor interviews and their uses for this study are delineated in the data collection and data analysis sections of this report.

Potential participant conflicts. Prior to the study, it was identified that the investigator may have potential recruits who were former students. After consultation with the investigator's mentors, it was decided that former students of the investigator could still be eligible for participation in the study, but the investigator would have to monitor these situations closely for difficulties.

The investigator recruited two participants who were former students. In one case, the investigator served as an instructor for one in a large pre nursing course before the participant/student transferred to another campus for nursing courses. In another case, the investigator served as an instructor for one large pre nursing course and one smaller nursing course before the participant/student transferred to another campus for her senior year. In neither case were there issues concerning student progression, nor did the investigator serve as the participants' clinical instructor. The investigator appreciated no detectable differences in the responses these two participants gave versus the other seven and in a few instances the former students/participants discussed nursing school including some criticism of the program. Discomfort between the investigator and the two former participants/students was not observed.

Data Collection

A major benefit of grounded theory methodology is the ability to obtain data through multiple sources. The task of the investigator is to orchestrate data collection so that inclusion is fostered, research questions are answered, and the process is uncovered. In the case of this study, the sources used were: 1) participant interviews, 2) participant journals, 3) preceptor interviews, 4)

orientation materials, and 5) field notes. Data collection began in February 1998 and concluded in November 1998. Primary participant data collection concluded in October 1998. Table 2 outlines the time table for the study.

Table 2
Time Table for Study

Date	Activity
January 1998	Facility approval obtained
February 1998	IRB approval obtained Contact persons notified to begin recruitment Data collection begins with first participants Data analysis begins
May 1998	Last participant recruited Data analysis continues
July 1998	Data collection for first participant completed Data analysis continues
October 1998	Data collection for all participants completed Data analysis continues
November 1998	Interviews with preceptors completed Data analysis continues
February 1999	Written report completed
July 1999	Audiotapes returned to participants Preceptor audiotapes destroyed

The bulk of data collected consisted of participant interviews and journals. The sequence of events occurred as follows: The face-to-face interview was conducted, two weeks later the investigator sent a letter to the participant asking the participant to make a journal entry with guidelines on what to write, a call to the participant was made the following week to set up the next interview. The

process included a monthly interview for four months for a total of five interviews, and monthly journals at the mid point between interviews for a total of four journals. The goal of the investigation was to track the socialization process closely without causing an undue burden with lengthy, frequent interviews. The investigator used interviews and journals alternated in two week intervals to ensure that essential data was captured without an undue burden. Table 3 shows the flow for the design of the interview and journal data collection techniques.

Table 3

Design Study Flow for Interviews and Journals

Day	Investigator	Participant
1	Interview #1	Interview #1
10	Letter sent to participant concerning interview and guidelines for journal entry	
15		Journal entry #1
30	Interview #2	Interview #2
40	Letter sent to participant concerning interview and guidelines for journal entry	
45		Journal entry #2
60	Interview #3	Interview #3
70	Letter sent to participant concerning interview and guidelines for journal entry	
75		Journal entry #3
90	Interview #4	Interview #4
100	Letter sent to participant concerning interview and guidelines for journal entry	
105		Journal entry #4
120	Interview #5	Interview #5
130	Letter sent to thanking participant for collaboration in study and when to expect report	

Participant interviews. An initial interview was conducted, then monthly interviews for a period of four months. The seven participants who completed the study completed five face-to-face interviews with the investigator. The two participants who terminated employment completed either two or three interviews, with one of the participants completing a post termination follow up interview in addition to her three interviews. The participant who transferred to the emergency department completed one interview. For participants who maintained eligibility for the study, a 100% interview compliance rate was realized.

In all, 42 interviews were conducted. Interviews were 30 to 60 minutes in duration and were audiotape recorded. The investigator would meet the participant at a preset location and time. From there, the investigator and participant would select an appropriate place to execute the interview if the meeting place was not already a quiet, private room.

Interviews nearly always occurred before or after a scheduled shift for the participant's convenience. This sometimes made acquiring an appropriate room a difficult task. There were instances in which interviews were interrupted. When interruptions arose, the interview was stopped until the person had left the room. On subsequent interviews, rooms found to have a higher likelihood of interruption were avoided, if possible. Field notes after the interview facilitated the investigator in detailing when and where interviews took place, and any occurrences during the interview.

Initial interviews were conducted within the first month of employment for the new nurse. For some participants, no orientation had occurred on the unit, but classroom activities were attended; other participants had up to three weeks of unit orientation, with the unit activities and classroom orientation occurring simultaneously. The purposes of the initial interview were to meet with participant, further discuss the parameters of the study, gain informed consent statements, and gather initial data concerning why the participant chose critical care nursing. If participants had experiences with either classroom or unit-based experiences, they were asked what activities they were having, what the setup of the orientation process was, and what they thought of their experiences to that point. One of the most important features of this part of the interview process was to access the participants' *expectations* of their experience. During the final interview, these expectations were brought back to the participant for their impressions on these earlier expectations.

Participants then took part in monthly interviews. Each interview was unique, with partial exceptions being the initial and final interviews. Interviews were unique in that each interview was dependent on what occurred during the previous interview and what participants had written in their journals. Because research questions are framed to gather data from participants' points of view, data collection was primarily participant driven. Each interview was geared toward unveiling the participant's story. However, there was a general structure across each interview because of the journal process being intertwined with the interview data. In most cases, the second, third, fourth, and final interviews

began with a discussion of what participants had written in their journals. After discussing journal entries, participants were asked what was happening to them from the point of their last journal entry to the current date. In some cases, the investigator would facilitate participants in sequencing by refreshing participants' memories with what was discussed during the previous interview. The major goals during these interviews were to highlight the process of socialization as participants experienced it, identify the most difficult points during the socialization process and the reason why these points were so difficult, engage participants in reflection to determine if and how difficult points in the process could be facilitated, and uncover the links that move participants from one stage of socialization to the next stage.

As noted the above, the final interview had more structure to part of the interview. Though the goal of revealing the theory of socialization continued during the final interview, general questions were asked in order to provide a summary of the process by using reflective techniques to review the four months of their experiences. In addition, participants were asked questions relating to administrative practices for the hiring of critical care nurses. The core list of questions posed to participants in the final interview were:

1. Looking back on your experience, is there anything that you would change about the structure of the orientation process?
2. What would have facilitated your progress through the first four months of your critical care nursing experience?

3. What kind of characteristics do you think are necessary to be a critical care nurse? (And the corollary question: Do *you* have those characteristics?)
4. If you were the nurse manager of this unit, what would you look for when hiring a new critical care nurse?

These questions were essential in providing direct feedback to critical care administrators as they undertake the difficult task of hiring a new staff critical care nurse. In addition, unit critical care educators will have information gathered at the point where the new nurse is intimately engaged in the process, providing for accurate and relevant data to make decisions on orientation program changes, if deemed necessary.

Journals. Participants were asked to keep a journal with at least one entry at the midpoint between interviews, and were supplied a pen, a stenographer notepad, and the investigator's business card stapled to the stenographer notepad for convenience. Letters, which were sent to participants approximately 10 days after an interview, reminded participants to make journal entries and provided guidelines on what to write. Below is a copy of the guidelines sent to one participant in a letter after the third interview:

1. What is happening to you now?
2. Is there anything that would facilitate you through this process?
3. How do you feel about how you are fitting in as a critical care nurse?
4. How is your comfort now when you come into work?

5. Did the EKG (electrocardiogram) class help you feel more comfortable with rhythms?

Though participants were given journal guidelines, they were encouraged to write as much as they wanted about any occurrence which seemed important to them. The goal of the journal was to track activities during the times between the interviews so relevant data was not lost due to the amount of time that had elapsed between interviews. With data loss prevention being the only major goal, participants were not restricted in the amount or style of what was written. Participant length and complexity varied greatly among participants from a few short paragraphs to several pages. Some participants made multiple journal entries during the monthly period.

Participants would bring journal entries with them to the subsequent interview, the investigator would read the entries, and the interview would begin. With the next letter, participants would receive a copy of their journal entries with the originals being retained by the investigator. Some participants related to the investigator that they sometimes read through their returned entries to keep track of their progress.

Participant compliance with journal-keeping varied from participant to participant. Some participants completed journal entries throughout the entire duration of their participation in the study while one participant completed no journal entries. In cases where there was no journal entry, the investigator took additional measures to ensure as accurate and complete data were collected as possible. In most cases, the additional measures included a detailing of what

happened to the participant each week from the point of the previous interview. More questions were asked concerning the multiple environmental stimuli that are presented to a new critical care nurse when no journal entry was available. Moreover, additional attention was given in the comparison of another participant's experiences to the experiences of participant at hand in the absence of a journal entry. In some cases, the supplemental attention given without a journal entry for reference reaped valuable data, while in other cases no further data were obtained. Of the 31 journal entries that were possible, 25 were completed for a compliance rate of 81%.

Preceptor interviews. The purpose of the preceptor interviews was to give the investigator another view of the data being collected from the participants and to assist in defining and refining the theory. The preceptor interviews, as used to enhance the credibility of the study, consisted of two separate interviews and are discussed further in the data analysis section of this report.

Though the primary purpose of this study was to uncover the socialization process of new critical care nurses from the new nurses' points of view, socialization processes do not occur in an individual vacuum. In reviewing Blumer's (1969) notions concerning symbolic interactionism, social interaction is directly related to interpretations and meanings that one assigns to a particular event. Therefore, the inclusion of someone other than the primary new nurse participants provides additional context and views of the situations facing the new nurse.

Initially, preceptors, educators, and nurse managers were chosen for institutional review purposes, as the people most likely to have an influential effect upon the socialization of the new nurse. This was an assumption made by the investigator. Originally, it was planned to interview preceptors, educators, and nurse managers at some point during the course of the participant's interviewing process. As the study progressed, however, a change in the timing and requirement for these secondary participants was required after a consultation with the investigator's mentors.

The first issue that surfaced was that of timing. During the course of the study, it was evident that participants were sharing details with the investigator of which none of the secondary participants were aware. Though the investigator remained committed to the privacy of the participants, she did not want to give the illusion of breaking that confidence by interviewing preceptors until the end of the participant's tenure in the study. The decision was to wait until the participants had completed the study before soliciting preceptors for interviews. The advantage to this approach was that as time passed, the new critical care nurse seemed to have more confidence and the doubt of whether the participant would be successful waned considerably. The disadvantage to this approach was potential loss of preceptor memories concerning the participant at hand.

As the final round of interviews were being completed, the importance of preceptor interviews became more apparent. It was found that participants relied heavily on their experiences with preceptors with little contact and

influence being encountered from educators and managers. The selection process for secondary participant interviews was then narrowed to preceptors.

The next decision point was whether it was necessary for all preceptors to be interviewed. Two preceptors were selected for interviews: one who had facilitated a "successful" new graduate, and one who facilitated an "unsuccessful" experienced nurse. These two preceptors represented a range of possibilities precepting new graduate nurses and experienced nurses. The preceptors have facilitated both and successfully socialized nurses and unsuccessfully socialized nurses. Each of the preceptors was recognized and chosen for their vast experience with precepting new nurses in critical care settings and both were known to the investigator prior to this study. From reviewing data, the investigator needed a confirmatory technique to support her claims of the linking process between stages in the theory. Though there was considerable new nurse participant data to support the proposed linkages, the investigator acknowledged these linkages as crucial points in the new nurse's socialization process, and an important contribution to the study of new nurse socialization.

Preceptor participants were shown an abbreviated model of the socialization process and asked about linking points between stages. Preceptor participants were also asked:

1. What characteristics are you looking for in a new nurse that are evidence that he or she is moving along in a successful manner?

2. Where are the points where you notice new nurses struggling the most? Are there any special techniques you use to facilitate a nurse through these periods?
3. What are the indicators you use to determine a new nurse is not going to be able to continue in a critical care setting?
4. When did you know that you were going to be successful in critical care?
5. Participants talked about “making it.” How do you know when they’ve made it?
6. Participants have also talked about “putting it together.” What is “putting it together” and how do you know when a new nurse is “putting it together?”

Additionally, preceptors described what they knew about the orientation process, preceptoring classes, and their role as the new nurse preceptor.

Preceptor materials were shared with the investigator.

Orientation materials. New nurse participants were asked to share orientation materials. The purpose of reviewing these materials was to analyze the structure and content of the orientation processes as a context for the socialization process. Orientation materials consisted primarily of orientation schedules, handbooks containing content of classroom and unit activities, and evaluation forms. Data were analyzed for both the consistency and differences across facility orientation programs. Additionally, access to this data allowed the

investigator to coordinate interview questions and journal entry guidelines with where the participant is related to the orientation program.

Field notes. One of the advantages of grounded theory methodology, and qualitative research methods in general, is the use of field notes for investigator reflection and as a source of data. Field notes are an essential part of the theory building process and allow the investigator to pose questions for the next stage of the inquiry. Field notes also detail areas where the investigator may have had difficulty in a particular part of the research. In some methodologies, notes concerning the context are referred to as field notes while specific thoughts concerning theoretical development are called theoretical memos. For the purposes of this study, field notes contained both contextual and theoretical entries.

Data Analysis

This section highlights the data analysis procedure used for this study. The techniques devised by Glaser & Strauss (1967) are followed closely to ensure analytical integrity. Following the description of the procedure is an example of how one uses data from multiple sources to uncover categories, reduce categories, and link them into a viable theory for the entire process.

Analytical procedure. Within ten days of the interview, the investigator listened to each audiotape and made notes as she listened to them. Field notes were made concerning the location, time, and esthetic surroundings where the interview took place. Initially, each interview was transcribed verbatim by a professional transcriptionist. As each transcript was received, an open coding

procedure was used to identify potential categories as they surfaced from the data by notation in the margin of the transcript.

There are two analytical processes related to this study in order to identify the emergent theory: 1) identifying the socialization *within* each participant, and 2) identifying the socialization process *across* participants. The first analysis is accomplished by composing a grid of the episodes at each phase of the individual participant's experience. Content analysis serves the purpose of the first process and occurs through the open coding and initial category identification process of grounded theory methodology.

The hallmark of grounded theory methodology is constant comparative analysis (Glaser & Strauss, 1967). That is, as each piece of datum is coded, it is compared with previous data. It is through the technique of constant comparative analysis that the uncovering of the socialization process across participants is accomplished.

As categories are compared, the investigator begins to examine the range of the category: Which incidents fit within the category, and which do not? Categories are then examined for overlapping criteria, and integrated as appropriate. From here, theoretical notions emerge and beginning thoughts of how the theory might look are sketched. The investigator also consults with others, such as the participants, key informants, or her mentors. For this study, the investigator worked closely with her primary mentor, an experienced grounded theorist.

At this point, the investigator may have even constructed some mini hypotheses for further investigation as occurred in this study. Theoretical sampling guides the rest of the study. The search now is not necessarily for data to support her hypotheses, but to search for instances which are *not* supportive of her hypotheses. Grounded theorists refer to this search for contrary instances as the “negative case” (Glaser & Strauss, 1967; Chenitz & Swanson, 1986). The negative case is essential in grounded theory methodology for two reasons: 1) It forces the investigator to consider another viewpoint for interpretation of the result minimizing bias, and 2) it strengthens the truth value of the resultant theory. The investigator is not devastated by discovering negative cases. Indeed, as discussed, negative cases are essential to the theory building process. The investigator must, however, explain negative cases to the best of her ability.

The next step is delimiting the theory (Glaser & Strauss, 1967). A literature search may assist in theory delimiting, but is not always necessary. The literature, for the purposes of this investigation, was used to provide a context for the relevance and position of the investigator’s findings.

Constant comparative analysis continues as the investigator examines incidents and their places in the theory. Here, the theory begins to “solidify” as fewer and fewer changes are needed with each incident comparison. In addition, categories are reduced to the properties which most accurately represent the category and become saturated. Theoretical saturation is an essential component for finalizing categories and refers to the point where no

new properties are discovered relevant to the category. Memos concerning theory and category development are generated for the purposes of the next step—writing the theory.

In writing the theory, Glaser and Strauss (1967) direct the investigator to use her coded data, memos, and theory to write the final systematic substantive theory. Armed with these annals, the investigator validates the categories, authenticates the theory, and identifies gaps in the theory. Examples of data used to generate categories and to form the theory are used in the written report as evidence to support the theory. Presentation of the categories, category linkages, and the complete theory are the result of this step in the process.

Trustworthiness. The parameters of trustworthiness (credibility, transferability, dependability, and confirmability) are discussed in an earlier section “Design Components” of this report. Detailed here are the specific tactics employed during this investigation to ensure trustworthiness.

Credibility for this study is achieved in each of the seven spheres delineated by Lincoln & Guba (1985). Prolonged engagement, persistent observation, and triangulation provide the investigator with enough exposure to the phenomenon to gain an understanding of its properties. Prolonged engagement was enjoyed during this study by contact with each participant over a four-month period, data collection occurring over a nine-month period, and data analysis occurring over a ten-month period. The study from the initial interview, to final analysis was one year. Persistent observations were realized through a series of five interviews conducted on a monthly basis, with four

successive journals collected monthly at the midpoint between interviews.

Triangulation of different data sources was achieved via participants and participant preceptors, while triangulation of different data modes was accomplished using interviews, journals, orientation materials, and field notes.

The investigator used peer debriefing, negative case analysis, referential adequacy, and member checks to ensure the data analysis procedures and findings matched data sources. The investigator's mentors were kept abreast of investigation procedures and initial findings. In particular, the investigator's primary mentor was consulted at the middle stages of theory development to confirm whether the analytical direction being taken was appropriate. Negative case analysis was an essential part of category refinement and theory development. Points of negative case analysis will be detailed in "Results" portion of this report. Referential adequacy was attained by identifying a set of initial raw data as a point to compare subsequent raw data to for the purposes of developing and supporting categories. Referential adequacy was also augmented by the use of direct participant quotes in the "Results" portion of this report. Finally, confirmation of results with participants ("member checks") was achieved during the last interview questioning, but also occurred during each interview when the investigator would request feedback on an interpretation being made of the data.

The investigator fulfills part of her responsibility concerning the transferability of findings by providing a contextual report of conditions under which the study was conducted. By providing information on the inclusion

criteria, recruitment area, and the final participant pool, the investigator provides the context needed for readers to make decisions on whether these findings are usable in their situations. The investigator also provides a section in this report on implications of the study.

Dependability was met through a detailed report of the data collection and analysis techniques. The experience of the investigator's mentors is important in this process. The investigator's primary mentor is an experienced and funded grounded theorist, two other mentors are experienced in critical care areas, and another mentor is the director of a university semiotics program as well as an expert in qualitative methodologies. The investigator's primary mentor, and to some extent, her other mentors, were provided with electronic mail reports on the progress and procedural issues related to the collection and analysis phases. Additionally, Glaser & Strauss' 1967 description of grounded theory methodology procedures was followed rigorously.

Confirmability is met through two avenues: 1) documents showing the progressive audit trail from data to categories to theory; and 2) meetings and correspondence with the investigator's primary mentor, and to some extent, her other mentors, in order to identify appropriate methodological processes. Table 4 provides a reference for each of the trustworthiness criteria and how each were met for this investigation.

Table 4

Trustworthiness Criteria and Evidence

Criterion	Definition*	Evidence for this Study
Credibility	"Truth value." How well the investigator's representation of the process matches the multiple realities uncovered in the investigation.	Four months spent with each participant, nine months spent collecting data, ten months in data analysis. One year from initial interview to final analysis (prolonged engagement). Data collected over four month period with interviews and journals each month (persistent observation). Interview data, journals, preceptor interviews, orientation materials, field notes (triangulation of different data sources and different data modes). Meetings/correspondence with mentors, preceptor interviews (peer debriefing). Negative case analysis. "Archived" raw data used as comparison point for future data and direct quotes used for support (referential adequacy). Last interviews geared toward confirmation of results, immediate feedback during interviews (member checks).
Transferability	The applicability of the research to others in similar situations.	Context under which study was conducted is provided. Scope of applicability of research findings in report is described.
Dependability	The ability of the data to yield similar results under similar circumstances. Met if credibility criterion demonstrated.	Audit trail of process documented in Example below. Primary mentor, and other mentors monitored procedural activities. Adherence to methodology. Credibility criterion met using multiple methods.
Confirmability	The product (theory) is found to be supported by the data.	Audit trail of theory available via transcribed interviews, journals, memos. Debriefing with primary mentor, other mentors.

*Lincoln & Guba (1985)

Illustrations and Examples of Data Analysis Techniques

The goal of the section is to provide the reader more detail of the major techniques in grounded theory: category development and negative case analysis. These two techniques represent important steps in the data analysis process in terms of illuminating core components and enhancing trustworthiness of the theory.

Illustration of category evolvment. This section furnishes the reader with a visual and logical representation of how one category for this study was uncovered. The category, "Putting it Together," was a substantial category in the second phase of the socialization process and provides the crux of the issues facing participants as they attempted to feel comfortable and fit into the critical care setting. The relationships to this category will be further explored in the "Results" section of this report.

Though naming categories can be a difficult task, the participants provided an excellent name for this category. The investigator's job, then, is to identify the components and scope of the category. Figures 1 and 2 track the precursors to uncovering the category, as well as prompts used to explore the criteria for the category.

Figure 1

Category Evolvement of "Putting it Together"—Precursor Events

"I'm very uncomfortable."
 "I'm comfortable with my skills . . . It's the ACLS stuff and when the patient goes bad is when I get the problems."
 "I really thought that I'd feel really comfortable at this point and I think it's going to take a little longer than I expected."
 "Well, I don't think it's something . . . it's kind of a comfort zone whenever I know they have a lot of protocols and I haven't gotten to go through all those . . . I can't even draw blood yet . . . I can't even read the rhythms right now."
 "I feel good about my assessment skills . . . I want to learn more about hemodynamics . . . I did pick up a rhythm change . . ."
 "I'm concerned about my skills level going in compared with to other people in the program . . . but I think I'm pretty good with assessing the patient."
 "There were a couple of things . . . and I felt a bit awkward having a student follow me just because I don't . . . feel that confident in all of my skills."
 "I know my basic assessments . . . My main thing has been . . . not just relying on the monitor . . . being worried about what it is on the monitor."

↑

Investigator: "How do you feel now about the care you are giving?"

Reading from the bottom of Figure 1, the precursor events described were elicited from the investigator question concerning feelings on care giving competency. Participants consistently discussed issues related to comfort noting comfort with some skills, but discomfort with others. These responses prompted follow up probes concerning the concept of comfort. Some of the responses to this probe are found in Figure 2.

Figure 2

Category Evolvement of "Putting it Together"-Intermediary Events

"Well, if I could look at a patient and actually see, you know, like this person is having this type of urinary output and this type of high blood pressure . . . and to be able to look at them and to know that the blood pressure is this way and I need to do this. You know, if I look at the heart or . . . the EKG . . . and say this is exactly what. I mean, it takes me awhile to come up with what it is, you know, and it should be automatic, but it takes me awhile to get to that point."

"I had a really good day . . . and they took his chest tubes out, he kept saying he had shoulder pain . . . and I kept on doing more frequent assessments on him and then I just noticed that his breath sounds just kind of went away . . . and so when I called Dr. XXX . . . that it could be a possible pneumo . . ."

"And I was really frightened and I'm feeling more comfortable with it now. And even with my preceptors . . . you know what kinds of drugs are in the drug box . . . and what would you do if your patient didn't have a heart rate and what would you do if your patient was in VT . . ."

"When I can look at some things around the unit, the monitors, and know what it means and be able to put it together . . ."

"You know, putting it together. Getting a quick look, quick assessment, having a general idea of what the problem is and making an intervention and the priority of interventions."

"When I don't always feel like I'm missing something."

"When I don't have to keep looking things up."

"I'm confident in my decisions on how frequently to assess and intervene."

"I still need to be able to know if a physician has ordered something wrong for this patient."

"I have to make decisions on whether to call the physician and whether I've gotten a questionable order . . . I'm still not totally comfortable with that."

"When my questions are more about thought processes than on mechanics."

"I want to be able to look at the patient and the EKG and automatically know what to do."

↑

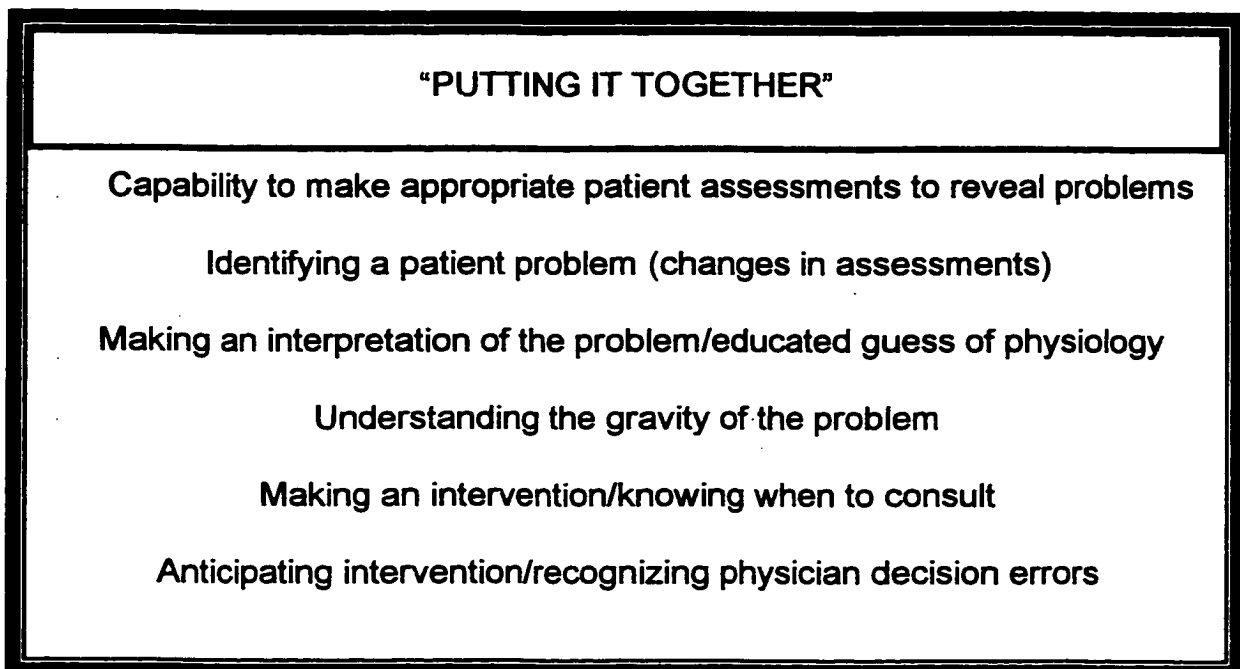
Investigator: "What would it take to make you more comfortable?"
(Followed up with probing questions to illuminate concept)

As identified in Figure 2, some participants directly name the process as "Putting it Together," while others describe the process. In some cases,

participants prefaced their description of the process by labeling it as either “seeing the whole picture” or as “critical thinking.” The investigator takes the intermediary analysis and forms the parameters of the category as illustrated in Figure 3.

Figure 3

Components of Category “Putting it Together”



Theoretical sampling not only was used to develop the above category, but also to develop the links between phases and categories of the socialization process. A good example is the use of preceptors to confirm and expand upon the link from the first phase to the second phase of the process, and appears in the results as “Disengagement/Testing.”

Participants consistently identified a time in the process where preceptors seemed to decrease in their availability to the new nurse. Some participants felt

they were undergoing a testing period after being given a base to make decisions. This area was slightly cloudy across all participants' responses, so the decision was made to interview preceptors in an attempt to illuminate this important link.

The preceptors interviewed revealed a very deliberate attempt to disengage from new nurses to evaluate where new nurses were in terms of their abilities to prioritize, organize, and think critically. Preceptors were still available for questions, but it was clear this was a time for testing. Preceptors clearly stated they needed to see if new nurses could make it "own their own" since the new nurses would soon to finish their formal orientation period under the preceptors' directions. Participants seemed to understand this phase, and began to disengage from their preceptors as well.

Example of negative case analysis. Negative case analysis presented fairly early in the study and was a turning point for the study. The category "Taking Charge" began to emerge, especially for participants who were struggling somewhat with the process. Activities comprising the "Taking Charge" category initially appeared to be both necessary and sufficient for the new nurse to complete the socialization process. However, within a month period of time, two participants who exhibited "Taking Charge" activities were terminated from their positions. This negative case analysis prompted more theoretical sampling to determine if there was something besides "Taking Charge" activities which contributed to new nurse socialization. Later, it was determined, through both participant and preceptor interviews, that critical thinking and problem solving

skills demonstrated in the “Disengagement/Testing” link were essential to completing the process.

Methodology Summary

Grounded theory design allows the investigator to choose from a variety of data sources which will provide information relevant to the questions posed. Because the majority of data for this study is obtained directly from the people who directly experience the phenomenon, the theory generated is highly germane to the participants involved. A detailed, rigorous analytical technique, with appropriate checks and balances, assures a trustworthy theory from heavily grounded data. Table 5 outlines the design and components used for this study.

Table 5

Summary of Design and Components

Methodology	Grounded theory
Participant protection	Individual facility review University Institutional Review Board
Participants	Recruited from adult critical care units in Central and south-central Indiana Final number of participants=10
Participant inclusion criteria	A Registered Nurse A new nurse to the critical care area Entering an adult critical care unit Entering adult critical care for the first time Within the first month of orientation to critical care
Data sources	Monthly face-to-face participant interviews Participant journals at midpoint between interviews Preceptor interviews Orientation materials Field notes
Data analysis	According to grounded theory procedures outlined by Glaser & Strauss (1967): Open coding Uncovering categories Delimiting categories Linking categories
Trustworthiness	According to Lincoln & Guba (1985): Credibility Transferability Dependability Confirmability

CHAPTER 3: CULTURAL CONTEXT

The purpose of this chapter is to give the reader some background of the types of settings and interactions typical of adult critical care units with the intent of enhancing the reader's understanding of context under which the analysis of data took place. To create this scene, the investigator is using the experiences of her participants, her mentors, her peers, and herself.

Unit Layout and Structure of Nursing Care

Adult critical care units vary in patient capacity, from as low as four patients to twenty or higher. Units tend to have similar features, however. Rooms are mostly private rooms with bedside monitoring equipment and supplies often contained within the room, a luxury not afforded to most regular nursing units. The nursing stations are situated in a manner where the staff can see directly into the patient room allowing for close patient monitoring while outside of the room.

Critical care units are constructed and organized with the understanding that patient care emergencies may occur on any shift, and frequently in any shift. Emergency equipment is readily available, including technology not found on many other nursing units such cardiac pacing equipment and surgery equipment. Emergency equipment is often centrally located or in each patient's room, and is readily visible. For some patients, the technology necessary to sustain life may include using nearly every electrical outlet in the room.

The nurse-to-patient ratio in critical care units is mostly 1:2 or 1:1 depending on the acuity of the patient. In the most critical patient care

situations, nurses may rarely leave their patients' bedsides. All energy is focused on the monitoring and interventions necessary for patient survival.

Nursing care in critical care units is almost always primary nursing care where nurses assume full and complete care for their assigned patients. This includes any skill from basic skin care to designing and implementing complex nursing and medical interventions. Many critical care units adopt the philosophy of complete and holistic care for both the patient and the patient's family. Consistent patient care assignments are often encouraged to facilitate this mission and philosophy. Critical care nurses often remark that they know "everything" about their patients. This type of knowing is often the reason nurses leave units where they must care for five, six, or more patients at a time, in order to give more in depth care to one or two patients.

Interactions

Nurses, being the health care providers who are constantly at the patient's bedside, serve as the coordinators and protectors of patient care. This coordinator role requires frequent interactions with people. In a typical day, nurses interact with patients, patient families, other critical care nurses, other nursing unit nurses, new orientees, nursing technicians, unit secretaries, physicians (many times there are multiple specialty physicians for one patient), residents, interns, nurse managers, respiratory therapists, physical therapists, laboratory technicians, radiology technicians, admission coordinators, and dietitians. Communication and interpersonal skills are of utmost importance for critical care nurses.

Nurses rely on interactions with other nurses for patient care organization, patient care information, and social benefit. While patient care in critical care units is mostly primary care, nurses are often in the position of having two patients who require attention, but only one assigned nurse. Nurses recognize the need for teamwork in order to deliver appropriate and timely patient care. Nurses have to rely on one another's competence to successfully render patient care. Underlying nurse to nurse interactions and teamwork is the notion of trust. Trust in a nursing colleague is competence related and must have been demonstrated in a previous situation.

Interactions with other nurses also provide social benefit. As with many disciplines, only a critical care nurse can understand another's plight as a critical care nurse. Indeed, it is a violation of the Code for Nurses (American Nurses Association, 1985) to discuss patient situations with those not directly involved in the patient's care. Critical care nurses debrief each other in difficult situations and share nursing stories for their entertainment effect. In this respect, nursing social situations might mirror those of others in high stress work situations such as fire fighters and police officers.

Though there are many situations where nurses are supportive of each other; the opposite occurs as well. Critical care nursing units can be rampant with gossip, though how they compare with other work environments is unknown. Some hospitals are worse than others, some units are worse than others, and some shifts are worse than others. The extent to which gossip appears may depend on the underlying hospital culture or the types of people

who staff the unit or both. Gossip in critical care units ranges from social gossip (who is seeing whom), to discussions of competence. To survive on this type of unit, nurses either form peer cliques or change shifts.

Physicians provide another dimension to critical care nurse interactions. Physicians rely on nurses for accurate patient information, suggestions on patient care strategies, and social support. Though nurse-physician relationships are portrayed as one large power struggle, as often they are, critical care nurses typically enjoy a more respectful relationship from physicians and attribute that respect to their nursing and medical knowledge. Physicians seem to understand that by the time nurses are able to make contact with them in emergency situations, the nurse has already made assessments, diagnoses, and interventions to avert a patient tragedy. Nonetheless, because differences in how patient care should proceed still exists between nurses and physicians, interactions can become quite stressful, even progressing to the point where nurses resign their positions (Reising, 1997).

Not only must critical care nurses contend with their own conflicting ideas with physicians, but must also resolve inter physician conflicts. Many times one physician will override or contradict another physician's request. This situation puts the nurse in a dilemma and can compromise patient care. At the very least, the nurse must spend time on the telephone, away from patient care, to resolve these conflicts. Depending on the physicians and nurses involved, nurse-physician relationships may serve as exemplars of true collegiality, or a constant battle of wills.

Critical care nurse interactions with patients are intense, though varied depending on the nurse. It is not uncommon for the focus to be shifted away from the more emotional interactions toward technical performances since some nurses enter critical care to improve their technical capabilities. Critically ill patients, while in need of substantial nurse interactions, often lack the ability to give cues for their needs. Many patients are unable to move or speak and nurses may not be capable in assessing patient needs without overt cues.

Interactions with critical care patients involve intrusive physical manipulations where no body part is left untouched. Interactions also consist of assisting patients to deal with what are, perhaps, the most traumatic events in their lives. In some cases, nurses are privy to patient information that no one else has, breeding unique relationships between patients and nurses.

Patients often realize, when they are able, how technically astute critical care nurses are, and often credit the critical care nurse with saving their lives. Patients may have difficulty leaving the critical care unit to go to another less acute unit because they are accustomed to frequent and immediate care. General floor nurses have been heard complaining that critical care nurses “baby” their patients resulting in a demanding patient and perceived unmet needs when the patient arrives on their unit where nurse patient ratios are much higher.

Because patients in critical care are in a tumultuous time in their lives, family members converge upon the patient during this crisis. Family members crave information about patient information and the nurse is a critical link to that

information, often having to decipher the medical language physicians use when communicating to patients and families.

Critical care nurses often find themselves in two dilemmas with respect to patient families: 1) how much information to give, and 2) how much time to allow for family visitations. Conflicts can occur when nurses reduce the amount of information they give or the amount of visitations they allow. Critical care nurses usually engage in a balancing act with respect to these two issues—trying to balance the needs of the patient with the needs of the family.

Like interactions with patients, nurse interactions with families vary from nurse to nurse depending on the comfort of the nurse. Patients and families leave critical care units feeling either indebted to the nurses, indifferent to the nurses, or angry at the nurses.

The Mystical Critical Care

Depending on the time of day one visits a critical care unit, a distinct aura may be felt. It is unclear whether families, or even some patients, have the same experiential vicissitudes that many nurses have. When entering a critical care unit, the lights may be dimmed, with constant background noise provided by cardiac monitoring alarms, ventilator induced breaths, and intravenous pumps. Some nurses have described needing a “noise-free” zone upon first arriving home to clear their heads of the twelve to fourteen hours of background noise exposure.

The critical care unit may at anytime be described as a graveyard, having experienced a multitude of deaths. Often nurses, and even patients, know that

death is imminent either through a “sixth sense” or through their frequent experiences with the process of death (Benner, 1984). Dying patients may describe these transitional visions to the person who is last with them: their nurse. These visions include traveling down a tunnel, seeing a bright light at the end of tunnel, “being with” and “talking with” other deceased relatives, and seeing the “man in the black robe.”

The investigator’s own experience involved a difficult late abdominal surgery patient with risk for complications. Many stories involving a man in a black robe, assumed to be The Grim Reaper, were described by the critical care nurses in the unit—each time a patient death occurred. The patient summoned the investigator to her room and asked if a priest was in the unit, because she thought she saw a priest. When asked what she saw, she said, “I saw a man in a black robe.” The investigator asked her where the man went. The patient pointed to a room in the corner of the unit and stated the man went into that room. In this room, a patient had just been admitted for acute congestive heart failure and required intense care. The investigator related the patient’s story to the nurse in charge of the heart failure patient. The investigator soon left her shift and after a twenty minute drive home, her nursing colleague phoned her to tell her that the heart failure patient had arrested and died.

Relevance of Cultural Context

When nurses initially enter the critical care setting, they may not be introduced to all the components of their new culture. Though many nurses understand the importance of learning new nursing skills, and believe there will

be increased expectations of them, they are often not aware of the intensity of their new environment. Furthermore, participants may not fully comprehend the consequences of working in such a culture during the initial phases of socialization. Readers will see this absence of comprehension reflected in the results of the study.

CHAPTER 4: RESULTS OF RESEARCH QUESTION #1

This section will detail the results for the first of the two research questions guiding this inquiry. Other discoveries during the data collection and analysis process are presented in the “Implications” section which follows this section. The two major research questions were:

1. What are the early processes of how a new nurse becomes a critical care nurse?
2. From the participant’s views, what factors play a part in the socialization process for new critical care nurses?

The Process

The crux of a grounded theory study is to uncover a basic social process. In this case, the social process is related to the transformation of a new nurse to that of a critical care nurse. The process contains categories within phases and categories to link phases. Each phase, category, and subcategory is defined, described, and supported with data. Linking categories show how one phase is linked to the next phase.

The Prodrome

During the first interview, participants were questioned about why they wanted to become critical care nurses, as well as what their expectations were and what they anticipated as they entered the critical care setting. The categories in “The Prodrome” phase were directed by the investigator’s questions for the purposes of gaining baseline data concerning the background to the process about to be uncovered. The first interview tended to be more

structured this way because the participants had no or limited experiences at that point. This is the only phase where categories are generated in this fashion.

“Why I Am Here: The Challenge.” Among the most frequent reasons for participants choosing critical care nursing were the desire for a challenge and perceived career advancement and marketability from surviving the challenge. For experienced nurses, this was often worded as “a new challenge,” while for new graduates, it was simply “a challenge” or their perceptions of the knowledge critical care nurses displayed during their educational experiences. Participants envied the knowledge that critical care nurses possessed and perceived critical care skills as valuable skills to master, accounting for their perceptions of viewing this area of nursing as challenging:

“. . . you get a lot of really good experience and kind of pave the way. If you can do a year here, then you can do a year anywhere . . . so, I wanted to get that kind of experience.”

“Probably the first thing was, I always remember my first semester of clinicals. . . . I just found that the nurses, I was amazed at how much they knew, how much information and how much stuff they could share about what was going on.”

“I wanted to work critical care for the excitement, challenge, and prestige. According to society, critical care nurses are the best nurses and I want to be the best.”

“Cause I had had some previous experiences with other types of nursing and I really don’t want to spend my time passing medications and doing Accuchecks all day.”

“But I decided that I was getting burnt out on those types of patients and I’m used to a fairly high intensity so I didn’t want something that was kind of day in and day out. I wanted something that was more exciting and something new all the time and so I just decided that critical care was something that I would be interested in.”

Exemplar quotes are provided for each category. The full range of quotes for each category is found in Appendix E.

While an occasional joke emerged during the discussions about the knowledge of critical care nurses, participants recognized critical care nurses as well-regarded by physicians, other nurses, and the public in general.

It is appropriate to ponder the “joke” as mentioned above. Participants who were previously floor staff nurses mentioned that critical care nurses have the attitude they know everything, which can be sources of tension among units. This is quite an interesting phenomenon since participants chose critical care because of this knowledge, yet find the way this knowledge may be demonstrated to reflect a “snobbish” manner.

The participant’s comment reminded the investigator of a comment by one her medical-surgical colleagues when the investigator announced she was transferring to critical care: “You know, you’re going to have to grow your fingernails long, paint them, and wear jewelry now.” We all had a great chuckle over the joke. Fortunately, the joke was not a true criterion for the investigator’s socialization into the setting.

In many cases, new nurses were aware of “fugitive” information about different critical care areas, especially if they were already employees of the institution. Each hospital unit has some sort of reputation, and critical care units are no different. It is unclear how this underground information is initiated, but it appears to become “common knowledge” while also taking on a life of its own—real or not.

It is through this fugitive information that a hierarchy of critical care areas was divulged. A few nurses discussed which critical care areas were “better” than others. “Better” was not necessarily an objective term, but a perception of how different critical care nurses behaved depending on which specialty unit they staffed. Though the middle of the hierarchy is a bit muddy, cardiovascular surgery units were perceived to be “better,” while general critical care units fell near the bottom. Somewhere in between are nursing units specializing in cardiology and neurology. The rationale was somewhat difficult to uncover, but participants identify it as a belief held by cardiovascular surgery nurses and not necessarily the rest. Apparently, the rationale is something to the effect of: The heart is the most essential organ, therefore, people who can fix the heart are the most essential. Medical cardiology units do not fare as well because they do not manage surgical interventions. In any case, this is a perception held by some, and perpetuates the “joke” at a different level:

“Yeah, critical care. They portray that they are better.”

“I get the feeling that the CV nurses think they are better than the critical care nurses. . . . I have been told that . . . I have heard them say, ‘Well it’s obvious this is so and so.’”

“(Critical care nurses) are the cream of the crop.”

“CCU (critical care unit nurses) are stubborn, uncooperative, and arrogant. They think step down unit nurses are stupid.”

Other reasons for entering critical care nursing were: past experiences either with a family member or in school, manager conveying confidence in the nurse to transfer, the shifts were more desirable, and nurse friends already

working in the unit. None of these reasons struck the investigator as odd until one of the participants was terminated from the unit. The investigator reviewed the participant's interviews and journals upon termination and found she was a participant who described this as one of her reasons for choosing to transfer to critical care:

"I think the main thing that brought me to the critical care unit was the fact that my father had died of a heart attack and because of that it struck an interest as far as how I might be able to prevent someone else having the same type of thing. . . . The floor I was working on I took the position to get my foot in the door. So it was definitely time for a career change."

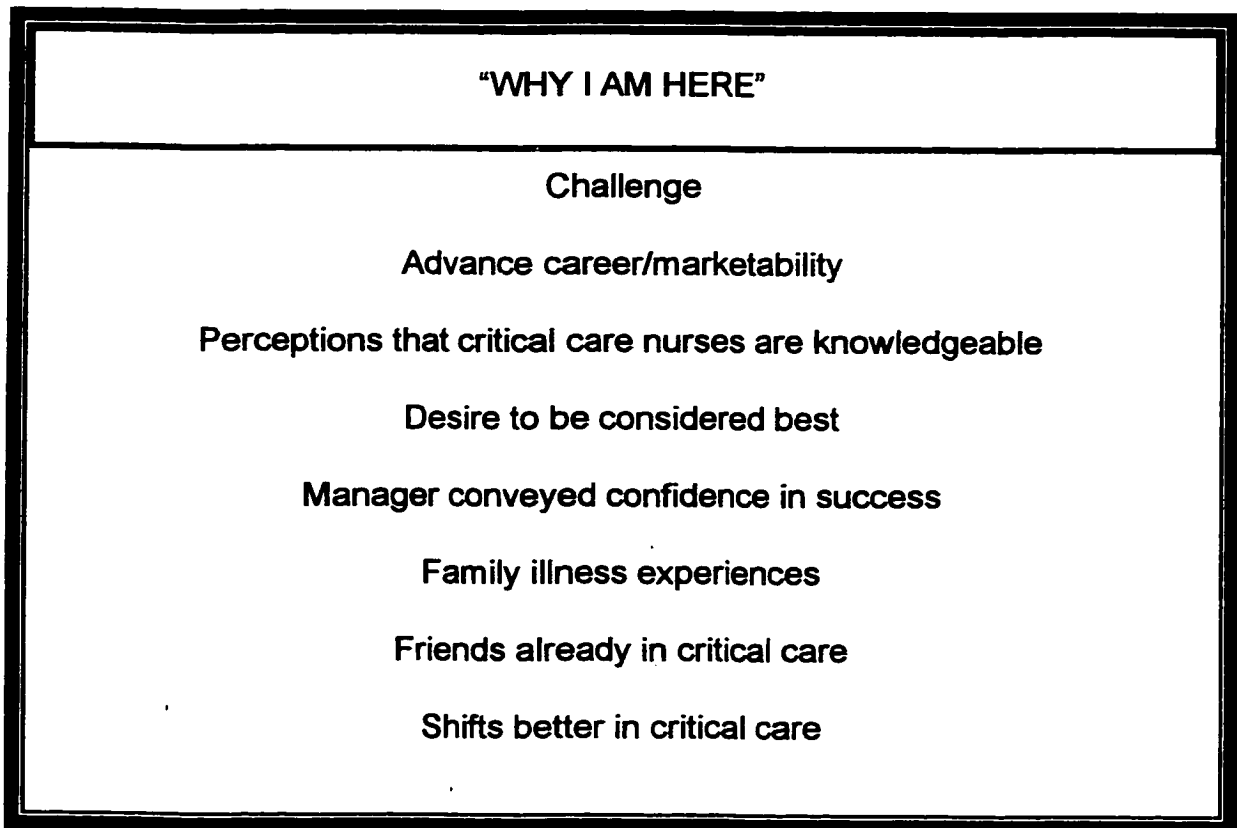
". . . and my director has confidence in me because of how quickly I caught on at the unit I work on now."

"I have a friend here who works nights . . . and I like the 12 hour shifts . . . and I just knew a lot of the people over here and that they were really nice and all."

Figure 4 is a representation of the core components of "Why I Am Here."

Figure 4

Parameters of the Category "Why I Am Here"



"Up for the Challenge." In the course of the first interview, participants were asked what they thought about going into the critical care unit, or what their experiences had been to that point. While some participants reported being "scared to death," either due to the complexity of patient illnesses, lack of experience, or the nurses' expectations of them, they were determined to go on with the challenge. Participants reported this in terms of their comfort level, or rather, their *discomfort* level. Realizing this discomfort and accepting they had much to learn, the participants reported themselves as having determination and

not afraid to ask questions to learn. One might even compare the anticipation and attitude to that of going into battle:

"I'm scared to death. But I think I'll be a really good nurse when I'm finished."

"I feel I have been given a tremendous challenge, and I'm going to meet it."

"I know I'll just have to ask a lot of questions"

"Vents don't intimidate me. I stay focused . . . 75% of this is your own attitude."

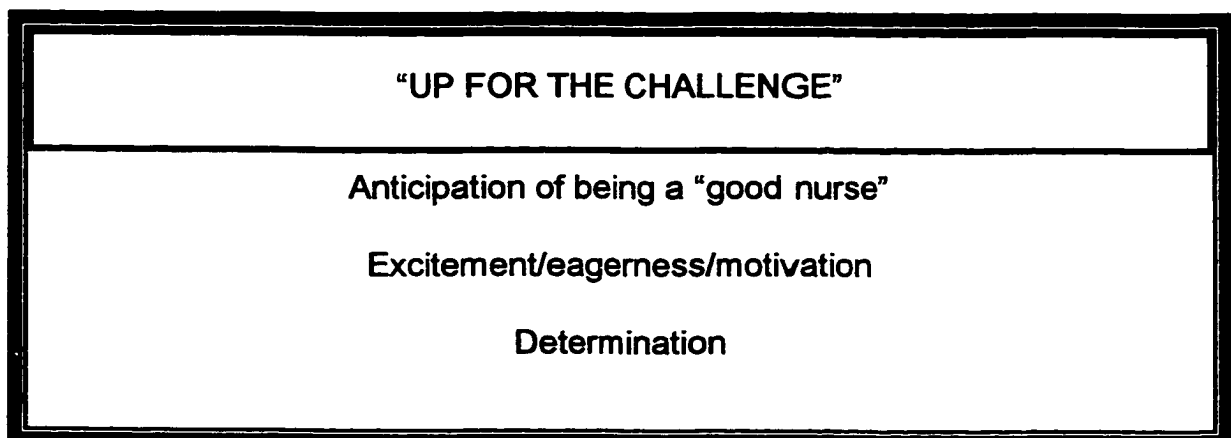
"I know I'm coming here to provide competent patient care and hopefully, people will have enough patience with me to answer my questions."

"I like it. I'm real excited. At first I was nervous, kind of, mainly, I think I was nervous because I was afraid I'd come in, you know, maybe they'd be OK here's your one person and I wouldn't know anything. . . . I'm really motivated. . . ."

Figure 5 denotes the core concepts in "Up for the Challenge."

Figure 5

Parameters of the Category "Up for the Challenge"



Welcome to the Unit

After initial courses consisting of new nurse orientation and some critical care concepts, new nurses meet their preceptors and begin the intense one-on-one experience where learning occurs during caregiving. This marks the beginning of an exciting, yet stressful time for new nurses as they are going to begin the experience they longed to have: caring for critically ill patients on the unit. While new nurses are excited, their fears concerning the complexity of the critical care environment as described in the "Up for the Challenge" category, are heightened as they become more real.

Preceptors and unit nurses welcome the new nurse to the unit, often formal introductions are made and staff members show warmth and support for the new nurse. Preceptors show new nurses the unit, make complimentary statements about the unit and the staff, and provide reassurances:

" . . . everybody has made me feel really welcome."

"The first couple of weeks are tours of information, you know, and they give you everything and tell you everything."

" . . . and they introduce me . . . 'Have you met so and so?'"

"Being Nurtured."

The initial relationships of participants with their preceptors are ones that could be characterized as parenting. The depth of the nurturing relationship did vary from one participant/preceptor dyad to the next, but was always present to some extent in all dyads. Indeed, there were instances where preceptors

protected their new nurses from gossip, criticism, and errors, at times mounting a defense if criticism rose to a certain level. Encouragement, considering the overwhelming feelings that were occurring with the new nurses, was the main form of nurturing. In many cases new nurses were reassured that their feelings were normal and that those feelings would pass. Preceptors often told their new nurse stories about themselves in difficult situations, which seemed to allay some of the new nurse's apprehensions. Alleviating fears and creating a reassuring atmosphere appeared to be the goals during this time:

"She (my preceptor) shares some of her similar experiences with me when appropriate."

"She (my preceptor) keeps telling me that I'm showing some of the same qualities she has as far as I'm very thorough with my charting. . . . She always reassures me that I'm moving in the right direction."

"But that was something I didn't know. . . . I didn't even have to ask her."

". . . I was amazed . . . that the first day we had that patient go bad and it was like 4 nurses in the room. They each knew what they had to do and you're not alone. So that's the thing and especially when they know I'm new. Like I've had a lot of people (offer) because they know I need IV starts. . . ."

". . . she's always, like today, 'You had a good day,' and I'm like, 'Blow it out your ear.' She was just trying. 'I had a bad day and you're just trying to (make me feel better).'"

"The first day that I worked with her, she was, you know, real good and showed me everything and was good with making sure I got to do things that I didn't do. She didn't leave me stranded or, you know, push things off on me."

In a couple of cases, participants expected more nurturing than what was received. The following comments detail those thoughts:

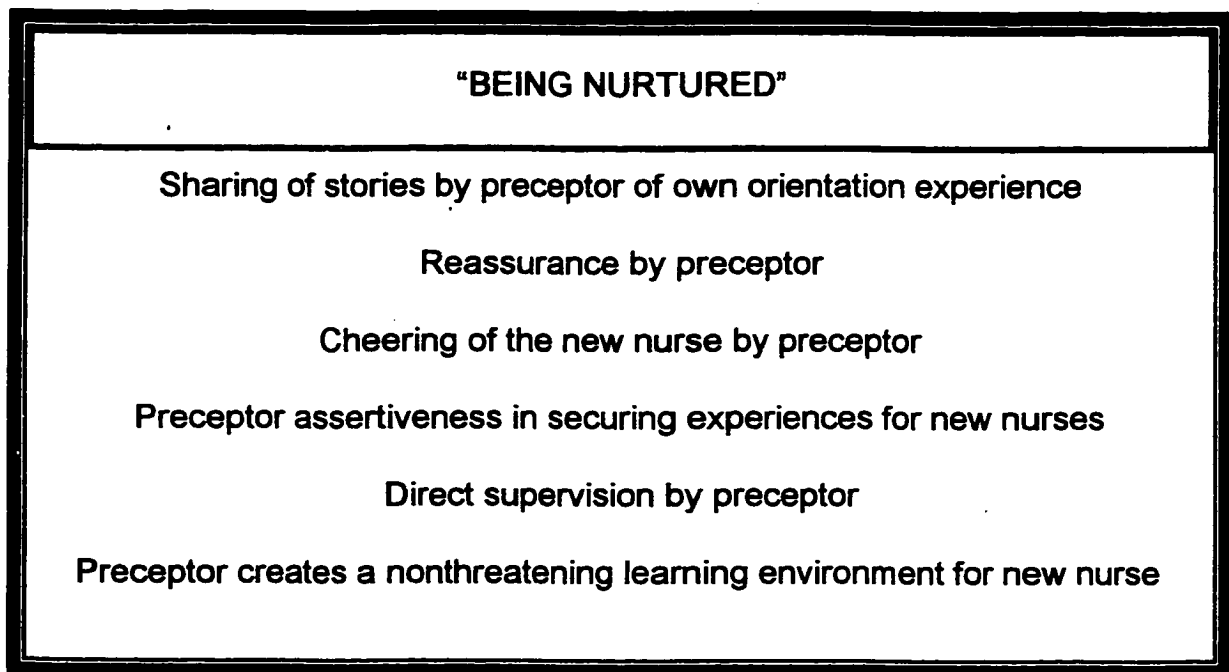
“... and I really didn't think she should be leaving me alone that much... I mean, I feel like I'm on my own too early.”

“From what I've spoken with the other nurses, a (new nurse) came over from _____. Their preceptors the first 2 and 3 weeks were right there. You know, during the assessment, the vital signs. Every detail, they were there and they were gradually leaving them alone.”

The components for “Being Nurtured” are in Figure 6.

Figure 6

Parameters of the Category “Being Nurtured”



*First Link - “Disengagement/Testing”

This phase consists of three distinctive categories and sub phases: 1) “Cutting It,” 2) “Why Am I Here?” and 3) “Taking Charge.” While incidents during this phase caused new nurses to question themselves, this phase also

represented a major period of growth. This link is initiated by the preceptor with a planned separation, and ends with the new nurse completing the detachment.

"Cutting It." Participants discussed this part of their process in terms of being more on their own; however, participants were still under the direction of preceptors who were charged with crafting the structure of the orientation process. While participants described more independence in their activities as a naturally progressing event, preceptors identified a carefully planned experience by which the preceptor would be less available to assess whether the new nurse was progressing. One may examine this experience and refer to it as "sink or swim," but it is clearly an event where the preceptor is keeping track of the new nurse, making judgements concerning growth, but able to perform a rescue if necessary.

In some cases, preceptors would carry their own patient loads while distantly supervising the new nurse with a less critical load. In other cases, the preceptor functioned only as the new nurse's preceptor with equal responsibility for the patient load.

This is a critical change in the relationship between the new nurse and the preceptor as the relationship turns from that of a nurturing relationship, to that of a performer/evaluator relationship creating an additional stressor for the new nurse. Preceptors were concerned about new nurses' ability to perform because they would soon end their orientation, and new nurses were concerned about the amount of support they would have with the impending cessation of the orientation. Preceptors were looking for evidence of the new nurse's own

competence and own decision making skills as an outcome criterion for the crucial step of allowing the new nurse to progress to the next step - coming off orientation:

"I am overwhelmed at times because my preceptor and I seek out the most challenging patients on the team. Even though it can be tiring, I know that it serves a purpose. If I care for the most challenging patients during orientation, I will be better prepared when I am off orientation. . . . Each day my preceptor gives me more independence. She does not help me or remind me to do things to test my independence."

". . . my preceptors (said), 'I'm going to stand back and today's your day and I'm not going to tell you to do anything.'"

". . . they're kind of at the point where they're like, 'You're on your own, and I'm just your shadow so you let me know when you need something . . .'"

"It wasn't like she really left me out alone. She just wanted me to feel like I as more independent because she felt like I was ready for that."

"Well, I'm going to remain with a preceptor and I expect more and more responsibility will be going over to me to take care of the patient load and they'll be there to coach and guide."

This is the point where two participants began to experience difficulties, occurring between the two and three-month period after hiring. Having experienced critical incidences that questioned competence and motivation already in a previous stage, the "Disengagement/Testing" phase served as confirmation to preceptors that these new nurses were just not "cutting it," in the words of preceptors.

What does “cutting it” mean? The investigator questioned preceptors and participants alike as to the meaning of “cutting it.” In this segment, evidence mounts about the importance of problem solving and decision making skills. In addition, knowledge of physiology was deemed to be either severely lacking or not being applied. It became clear that simply being able to perform the tasks for the day was not enough for new nurses to “cut it.” Preceptors were requiring analysis and interpretation of data to plan the day for the patient. So, “cutting it” came to mean that new nurses needed to be able to take the knowledge from orientation classes and their preceptor and apply it to new situations. Below are some examples of the struggles of not being able to cut it:

“Working on the critical care unit has been extremely difficult. I can’t seem to catch on to what is going on.”

“I can tell my preceptor is aggravated by me quite a bit now. . . . I feel a lot like a brand-new nurse out of school. It’s frustrating.”

“I was a little concerned that I wasn’t catching on the way I usually do especially since it’s a hands on thing, I usually pick up on things pretty quickly. But with this critical care stuff, I’m not picking it up as quickly and that bothers me. . . . They’ve told me that, but . . . I’ve still got these expectations and it makes me feel uncomfortable.”

“. . . I know the . . . general functioning anatomy and physiology . . . and when you go and try to apply it to . . . the way to put a Swan Ganz in and all that kind of thing . . . kind of alters the whole picture.”

“Cutting It” is similar to a category described below “Putting it Together,” however the criteria for “cutting it” appears to be related more to applying basic nursing skills, and perhaps even basic critical care skills, rather than having an

understanding and application of more complex critical care skills. In short, could the new nurse transfer basic nursing skills to a critical care setting? In two cases, the perception of preceptors was that this essential skill did not occur, which eventually resulted in the termination of two participants.

Preceptor participants were clear in their intent and criteria for their judgements of new nurses during this phase. Preceptors confirmed and illuminated the process of determining whether someone was going to be able to “cut it,” as well as citing the reasons why someone would not be considered ready to move out of orientation:

“It’s my job as preceptor to make sure they’re (new nurses) getting what they need and doing what they’re supposed to do. They will soon be off orientation and need to know what it’s like before they don’t have me around. . . . They have to be able to organize and figure out what they’re going to do with the patients. They also have to be able to prioritize.”

“I’m hoping for light bulbs to go off . . . that they are able to apply concepts to new situations.”

“I’m looking for problem-solving skills and for them to move away from such a task-orientation.”

“I want them to show intelligence, be able to make quick decisions, be organized, and stand on their own two feet.”

“My red flags are if they are too confident, don’t look up meds, are providing unsafe care, missing important data, or lack motivation.”

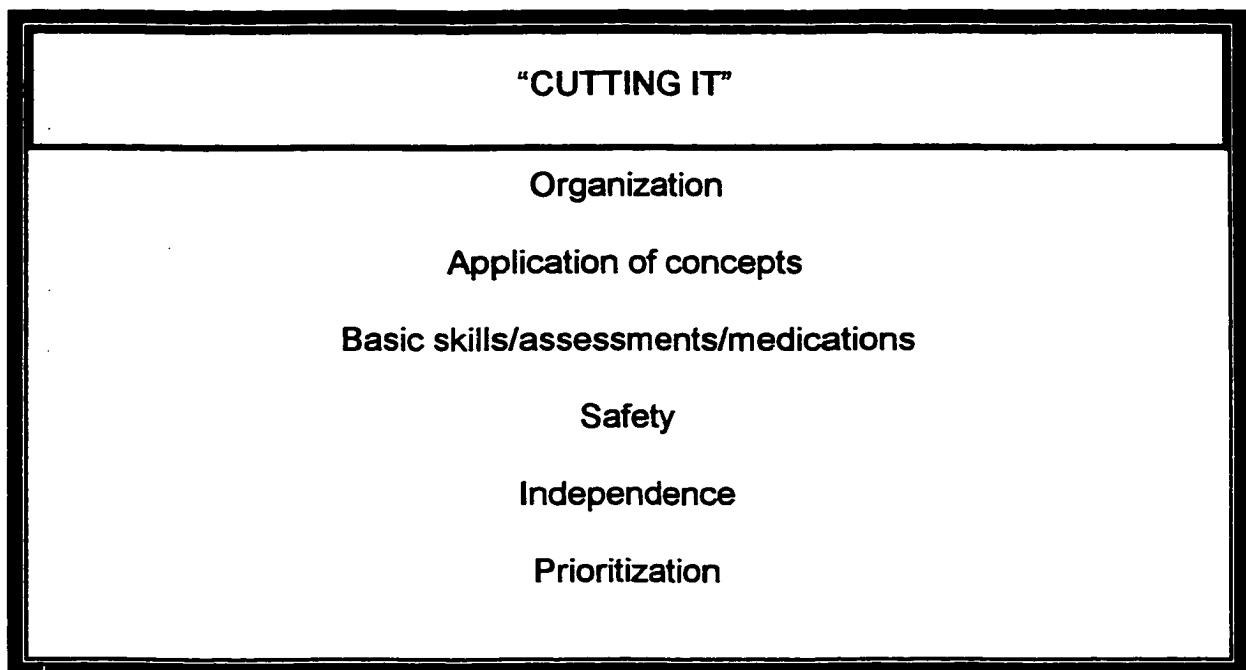
This is another point at which selective sampling occurred. The investigator determined data collection and analysis was approaching a point of saturation when these two participants were terminated. Immediately, the investigator realized both were from cardiovascular surgical units generating a

need to look for at least one more participant from a cardiovascular surgical unit. This was accomplished and the participant generated the data needed to complete the analysis which found new nurses entering cardiovascular recovery units to experience a similar situation as new nurses in other critical care units.

The core components of "Cutting It" are shown in Figure 7.

Figure 7

Parameters of the Category "Cutting It"



"Why Am I Here?" Soon after the nurturing period, which some participants felt was much too abbreviated, was the "Why Am I Here?" stage. This period is characterized by the participants questioning themselves on a variety of levels: ability, confidence, prioritization, and fitting in. Here, participants feel a tremendous burden upon themselves, realizing they have much to learn as well as being unsure of their abilities to learn and apply what is

necessary to become a critical care nurse. Embedded in this category is the notion that if participants could not be “good” critical care nurses, they did not wish to be critical care nurses at all. Many participants contemplated returning to their prior positions or making another change, though none did during this part of their process:

“. . . cause I forgot to check somebody’s blood sugar and I got really upset . . . and they’re really good about encouraging me to keep going . . . because for a while there I said, ‘Well, I’m not going to do critical care anymore. I’m not even going to stay in the hospital.’”

“. . . and I keep thinking to myself, ‘If everybody felt this way when they started as a new nurse in critical care, how come I don’t hear about all of these nurses that have left critical care?’ Because I wanted to so many times just because I’m not comfortable. I haven’t heard of anybody who said, ‘I can’t do this I’m leaving.’ They are all still here. They all stuck it out.”

“. . . and it was a little bit scary for me last week. I know I had some second thoughts. I was really thinking am I going to be able to do this and you know, I hate making mistakes.”

“. . . it was just like, ‘What did I get myself into?’ . . . a patient went bad and we’re going to CAT scan stat, god the patient had hemorrhaged, they were intubating . . . all this stuff was happening and I was just in the corner.”

“After the first night (shift), I had no self confidence. I felt like going back (to former employer) . . . but I’d just feel like I’d be giving up if I went back.”

Figure 8 depicts the core components of the category “Why Am I Here?”

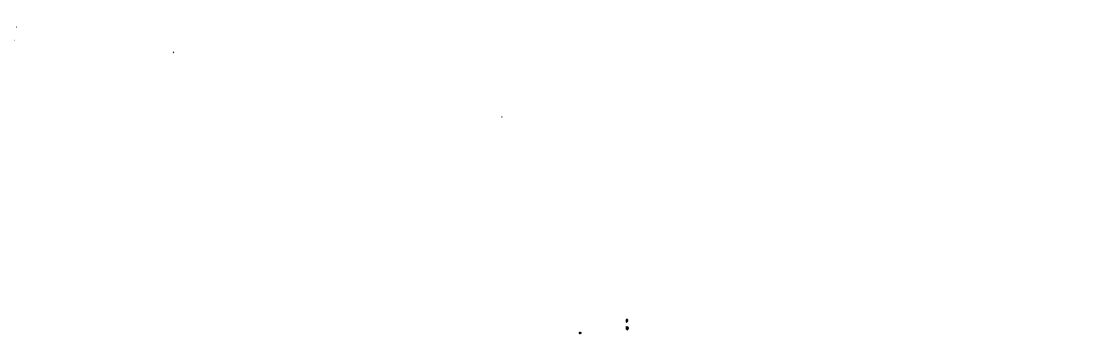
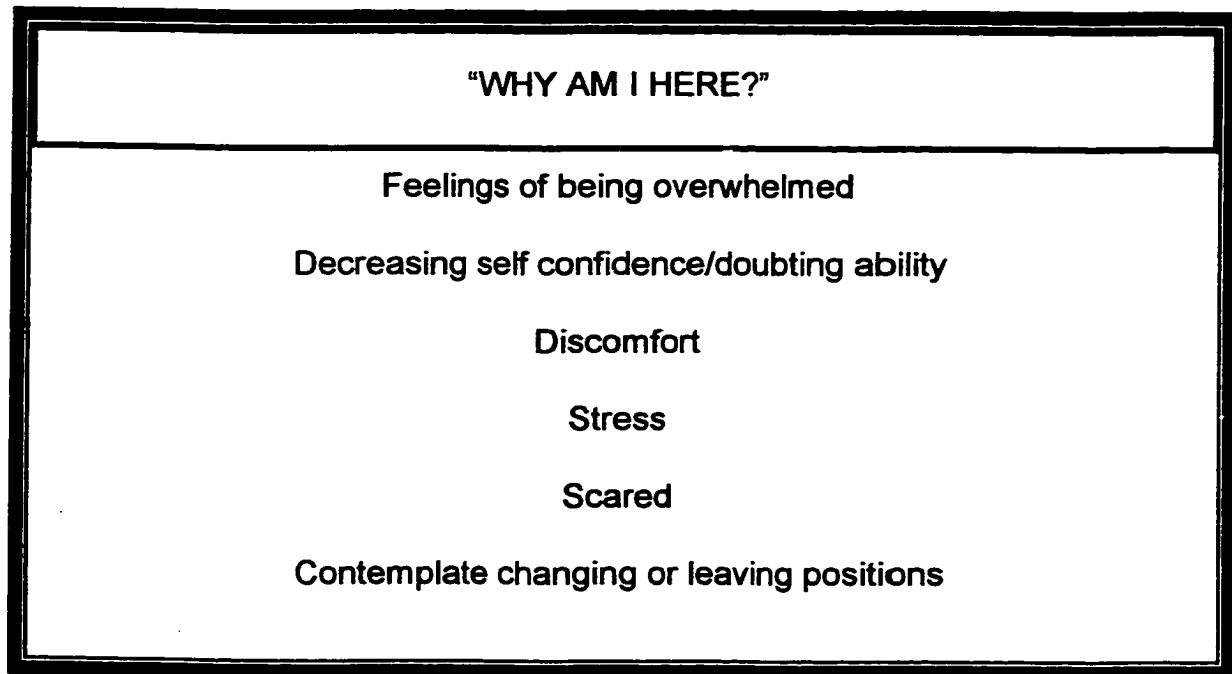


Figure 8

Parameters of the Category "Why Am I Here?"



"Taking Charge." In order to move to the next phase, participants had to gain control of their experience once again. Considering that orientation would soon end, new nurses must be emotionally prepared to continue. Participants, whether progressing successfully, or less successfully, identified a desire for increased control over their orientation experience. In many cases, control was taken by seeking out protocols to learn, independently scheduling additional learning experiences, or seeking advice from other nurses.

In two cases, "Taking Charge" was a response to feedback from preceptors, educators, and nurse managers after critical incidences questioning the ability of the new nurses to complete the orientation process. Immediately after these feedback episodes, the two nurses heightened their control over the

orientation process, including securing appropriate documentation for skills achieved:

“. . . and I came back out with a stack this big . . . I didn't even know that all this stuffs was in there . . . and to give it to the patients . . . and can be really helpful when you have post op patients and you have to do their teaching. So I've got all of those at home and I've been reading through those.”

“I have an orientation handbook and (my preceptor) is supposed to be initialing everything I did. But I've been going home and highlighting everything that I've done, but she hasn't checked off.”

“No one ever seemed to think that maybe I'd need to know those (protocols). But the only way I've learned some of those is by grabbing the policy and procedure book over there.”

“I feel I have to do it (take control of my progress), because my preceptors have been so erratic.”

“I already have a list of my own on things I need to look into . . .”

As identified, the investigator initially believed “Taking Charge” was necessary and sufficient for nurses to continue—that having this characteristic alone was enough for the nurse to successfully complete the orientation process. The reader already knows this was later contradicted by negative cases, and will read in a subsequent section where “Taking Charge” was not enough to continue the experience.

Not all new nurses experienced the “Taking Charge” phenomenon, or they experienced it to lesser degrees. There is some evidence that the intensity with which a new nurse had to take charge related to the amount of nurturing

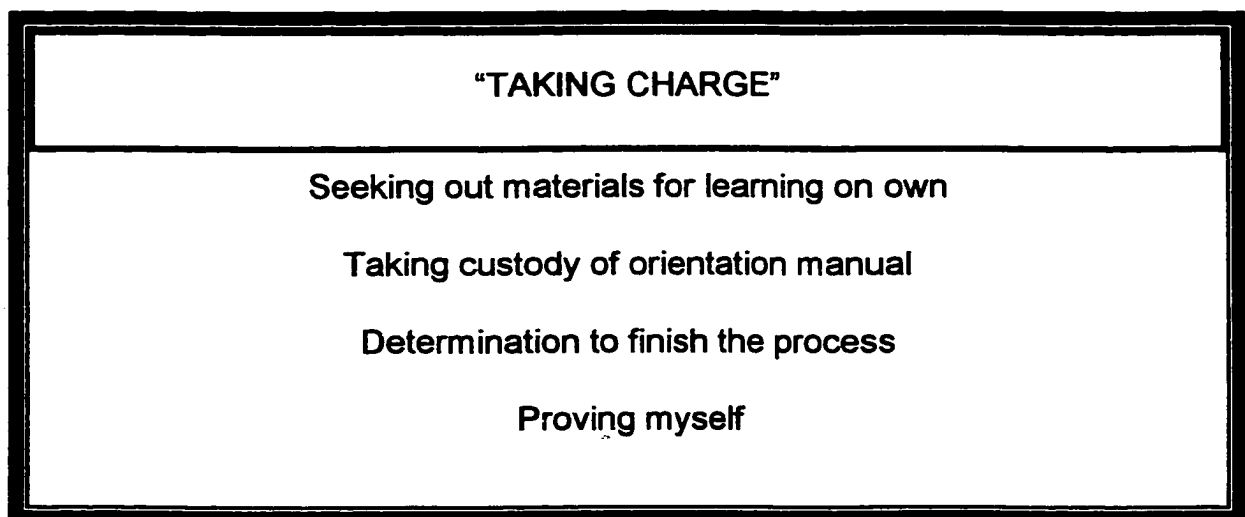
they experienced. For example, a new nurse was terminated and new nurses who had not experienced consistent preceptors strongly exhibited behaviors related to "Taking Charge." Conversely, two new nurses, who appeared to have strong nurturing relationships with their preceptors, either exhibited little or no "Taking Charge" behaviors with respect to their orientation experience. These two nurses completed what they perceived as a "successful" four months of the socialization and orientation process and were new graduate nurses.

While a generalization concerning the relationship between the nurturing intensity and the necessity of "Taking Charge" behaviors can be made, it is certainly a potential area for further exploration. The hypothesis for this relationship would be "As nurturing intensity increases, 'Taking Charge' behaviors decrease."

Figure 9 shows the core concepts of "Taking Charge."

Figure 9

Parameters of the Category "Taking Charge"



"On My Own"

With some anxiety, and sometimes, great fear, new nurses broke ties with their preceptors to accept responsibility for their own patient loads. This typically occurred between six and ten weeks after the new nurse's start date. There were two cases where orientation was extended by two weeks. In one of these cases, the two weeks were added to the day shift orientation, but removed from the night shift orientation resulting in no net change in the length of orientation. Two participants felt they could ask for and receive an extended orientation, but felt the request would not be looked upon favorably:

"Maybe I would have liked another week or two on nights . . . I don't think they could have said no to me. But I think they would have thought, 'Well, what is your problem? Aren't you oriented enough?'"

". . . and my preceptor agreed. She thought it was ridiculous to assume that six weeks on the unit was enough. . . . They kept reassuring me that if you have questions there are plenty of people to ask. Well, sure, but if they're busy, what if I've got someone complaining of chest pain? Well, I need them in the room ASAP. You know, are they going to be free? . . . I think they probably wouldn't like it, but yeah, they'll give it to me."

Though accepting responsibility for assigned patient loads seems to be a major step, care is taken to facilitate new nurses into their new roles. For example, new nurses accepted responsibility for their patients, however, the *level* of responsibility is not full and complete in these early phases. New nurses who were on their own, often were not comfortable in many of the new critical care skills including electrocardiogram reading, pulmonary artery catheters,

intracranial pressure monitors, titration of intravenous drip medications, and codes. While new nurses were providing care for patients requiring this technology, support was available from other staff in order to assure appropriate patient care. Most new nurses still required assistance with electrocardiogram interpretation. In many instances, new nurses would attempt an interpretation, then consult with an experienced nurse to determine whether their interpretations were correct. Discomfort with the technology is readily apparent in this stage and prohibits full responsibility:

“When I watch the nurses who are running it (the new nurse’s code), they are so calm . . . and I don’t know my algorithms and . . . what rhythms and it’s all just a mess. And I don’t feel confident yet.”

“During report I found each patient to be critical and each unstable with either ICP (intracranial pressure) or BP (blood pressure) problems or major traumas. When it came time to pick patients, I felt like I was going to cry because I didn’t want any of the patients. Almost every patient on the team had to travel (go for a test off the unit) that day. I did not want to travel by myself.”

“(during a code) . . . I mean I didn’t know how to start IV’s . . . they’re like, ‘Do you want to put this NG down? I’m like, ‘Oh no,’ which I could have done, but at the moment I was like, ‘No way.’”

“I had to get advice and help to titrate the nitro (intravenous nitroglycerin drip) . . .”

“I feel like I can handle my patients . . . but I don’t think I can do it all by myself right now.”

“Putting it Together.” While the “Disengagement/Testing” link is the most critical time in preceptors’ views, the new nurses’ perception of their ability to “put it together” while on their own, was most critical from their perspectives.

New nurses acknowledged that much of their discomfort was associated with not knowing or understanding the whole picture for the patient. New nurses were not always sure why nursing or medical interventions were being made, nor were they able to anticipate some therapies. A good example might be knowledge of post procedural care for the angioplasty patient. Another example is anticipating the ordering of a particular drug for certain patient circumstances.

Putting it together became a goal as well as a source of frustration for new nurses. They understood the necessity of appreciating all the factors affecting a patient, and saw other nurses "automatically" knowing what to do for their patients, but were not always sure how to make that knowledge "automatic" for themselves. The lack of this knowledge resulted in frustration, especially with the realization that new nurses were on their own, with little direction, and no plan for how to reconcile the frustration. In essence, new nurses could not conceive of a way to get from point A, their current level of function, to point B, their desired level of function; resulting in great discomfort.

Contributing to the frustration was the desire to be an expert critical care nurse *right now* and new nurses were not sure why that could not be. New nurses explained that they were moving along appropriately in the orientation process, but had anticipated being further along than they were in terms of putting it together.

At this point, the investigator identified that new nurses were operating under two sets of reference points for success: external and internal. External indicators of appropriate progress and success were preceptor evaluations and

peer support. Internal indicators of success were predetermined by new nurses when they began their orientation process. As new nurses progressed through the process, they compared their internal indicators with their current statuses. Often, a mismatch resulted from this comparison. However, mismatches were not evident in the external indicators. With peer support and reassurance, new nurses advanced to the next stage despite the mismatch with internal indicators. Regardless of peer support, a perceived failure to meet a personal goal in the predetermined time prevented optimism:

"I can't believe how uncomfortable I still feel. It's been about a month since I've started actually working on this unit. I feel my whole body tense up as soon as I come on the unit in the morning."

". . . I think I've got certain expectations of myself as well as I know my preceptor has certain expectations for me . . . when I get her upset then I know I have failed what she expected of me which only makes it worse on me because you know I've already got a higher expectation than what she has."

"I think it's going to take me awhile. I really thought that I'd feel more comfortable at this point and I think it's going to take a little while longer than I expected. I'm a little disappointed in myself because . . . I thought I was doing so well at the end of orientation. That's because I have that crutch there . . . so, I am a little disappointed, but I know I'll get through it."

"I'm probably farther along (than the other orientees), and I'll admit that I'm probably not as far as I should be."

"I don't feel like I'm where I want to be and I don't know if maybe I want to go faster than what people usually do or exactly what."

New nurses were much better in their organization skills as this phase progressed. Indeed, the increased organization allowed them more time to investigate their patients more leading to their ability to gather data in an effort to put more together:

“I have time to read the patient’s charts and get a thorough history.”

“ I set up my own organizing system and now I have a little more time.”

“My confidence is improving as my organizational skills improve.”

“I’m more organized now and that makes me more comfortable. I have more time to look at charts.”

Despite a mismatch in perceived progress versus a predetermined goal, experiences during this period were confidence builders or allowed new nurses to get back the confidence they perceived they had lost in earlier stages. While new nurses were confronted with new and difficult situations or their skills challenged, their ability to survive these situations and evaluate their skills improved their outlooks on their progression:

“I feel more confident in my assessments, even when someone else has a different assessment than mine.”

“I detected a change in a rhythm and I felt really good about that. I was also able to problem solve the situation.”

“I feel comfortable with my assessment skills and my ability to make decisions.”

“. . . I think I’m very good with assessing the patient. . . . I’ve gone at least two occasions where interns have no assessment, neither pupil reaction nor one side is

weaknesses which have not been charted on a previous shift and I've found it."

"I know my basic assessments . . . and finally I said, 'I used to be a nurse with no monitors,' so I think it's very good."

The parameters for the category "Putting it Together" are illustrated in the last section of the methodology chapter. The concepts are repeated here in comparison with the category "Cutting It" in Figure 10.

Figure 10

Comparison of Categories "Cutting It" and "Putting it Together"

"CUTTING IT"	"PUTTING IT TOGETHER"
Organization	Capability to make appropriate patient assessments to reveal problems
Application of concepts	Identifying a patient problem
Basic skills/assessments/medications	(changes in assessments)
Safety	Making an interpretation of the problem/educated guess of physiology
Independence	Understanding the gravity of the problem
Prioritization	Making an intervention/knowing when to consult
	Anticipating intervention/recognizing physician decision errors

Second Link - "Reconciliation"

New nurses were often able to identify a nurse with whom they intended to role model—a nurse who exemplified their perceptions of a good critical care nurse. This became the means by which new nurses would try to achieve the desired practitioner level. Additionally, new nurses began to seek advice concerning their frustrations over becoming a good critical care nurse. New nurses received comfort from peers who shared personal stories about their own venture through the process. Many experienced nurses conveyed to new nurses that it would be six to twelve months before comfort with critical care patients would be realized. New nurses also were told that the time and experiences with patients would be the necessary component for achieving comfort. Essentially, new nurses were being instructed by their experienced peers to decrease the intensity with which the new nurses were trying to become expert; that there was not much new nurses could actively do in order to feel more comfortable in a quicker amount of time. Letting nature take its course seemed to be the message:

“. . . and in a discussion I had with the group that I met with, they said, ‘You know I should always feel a bit uncomfortable because if you don’t then there’s something wrong.’ So, I mean, I guess, I’m feeling normal maybe a little bit more than I should because it’s such a new situation, but it’s still an uneasy feeling.”

“She (my preceptor) told me it would take me about a year to . . . start feeling comfortable. Which sounds like a really long time, but she said it goes pretty fast. So she says that what I’m feeling is normal or at least that’s how she felt.”

“I still have a long way to go, but I think I have (made it). Personally overcoming the fear that I wouldn’t be able to stay was important.”

“I know that I still have a lot to learn and I learn something new every day. I know that nursing is a continuous learning process and I need to push myself to continue to study and learn.”

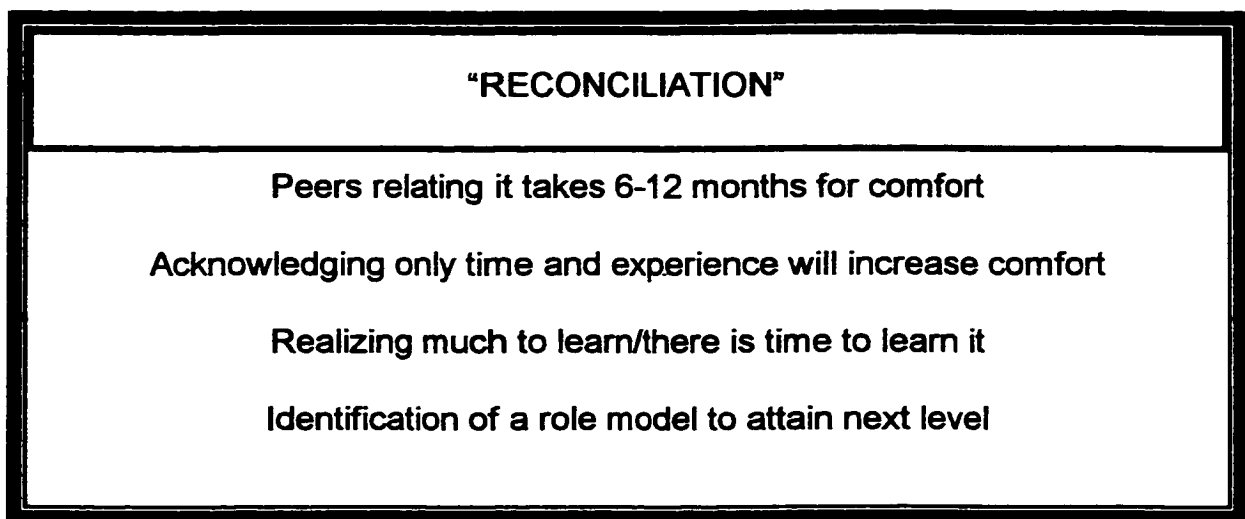
“I still have a lot to learn, but everybody does, so I don’t doubt my ability. . . . I’ve passed the rough part.”

One may think that the experienced nurses’ advice would cause new nurses to remain frustrated; however, this was not the case. Whether new nurses were exhausted looking for ways to achieve expert status, ready to hear the message, or whatever one might postulate, new nurses resolved that to become their role model, they just needed time and experience, and that this required, well, time and experience. One could almost see the proverbial “load being lifted from the shoulders” when this realization occurred. New nurses were confident they had survived the worst part of the process, and no longer questioned their abilities to be critical care nurses.

Figure 11 depicts the core components of the category “Reconciliation.”

Figure 11

Parameters of the Category "Reconciliation"

"Am I a Critical Care Nurse?"

Having reconciled that time and experience would be the factors with which new nurses achieved a higher level of function, these new nurses were now faced with determining whether they were good enough to think of themselves as critical care nurses. The question at hand is whether the socialization process is complete.

New nurses were prompted during this phase of the interview process for their reactions on whether they considered themselves critical care nurses. The question came in the form of "When people ask you what you do, what do you tell them?" Below are examples of responses to that question:

"I am a nurse."

"I tell people who ask, that I'm a critical care nurse."

"I say I'm a nurse."

"I tell them I'm a nurse."

While two new nurses quickly identified themselves as critical care nurses, most others hedged. Some felt that identifying themselves as critical care nurses depended on who asked the question, because of that person's level of understanding concerning nursing specialties. It was unclear to what extent participants as a whole identified themselves as socialized to critical care nursing. The investigator is left to postulate whether the possible incomplete socialization is related to the reconciliation phase where new nurses come to terms with the limits of their current abilities. Perhaps socialization is not complete until sometime between that six and twelve-month period identified by experienced nurses as the period where comfort is achieved. Still, one is left to ponder why some nurses were eager to identify themselves as critical care nurses, while others were not so quick to do so.

Thus, the phases, core categories, and links of the early socialization processes of critical care nurses have been presented. Figure 12 provides visual representation of the sample codes used for each core category and link in the process.

Figure 12
Sample Codes for Core Categories and Links

The Prodrone →	Welcome to the Unit →	Disengagement/Testing →	On My Own →	Reconciliation
<p><u>"Why I Am Here: The Challenge"</u></p> <ul style="list-style-type: none"> * Gain foundation * Gain knowledge * Be one of the best * Challenge <p><u>"Up for the Challenge"</u></p> <ul style="list-style-type: none"> * Anticipation of being good * Eagerness to learn * Acknowledge there is still much to learn 	<p><u>"Being Nurtured"</u></p> <ul style="list-style-type: none"> * Sharing experiences * Looking for experiences * Given information Without asking * Making a good day out of a bad day * Reassuring 	<p><u>"Cutting It"</u></p> <ul style="list-style-type: none"> * Being left alone * Increase challenges * Independence * Increase responsibility * Pushing * Problem solving * Quizzing * Knowing basics <p><u>"Why Am I Here?"</u></p> <ul style="list-style-type: none"> * Questioning self * Increased stress * Discomfort * Feel overwhelmed * Losing confidence * Fear <p><u>"Taking Charge"</u></p> <ul style="list-style-type: none"> * Increased motivation * Acquiring materials on own * Determination * Control orientation 	<p><u>"Putting It Together"</u></p> <ul style="list-style-type: none"> * Organization * Skill confidence * Managing more difficult patients * Decision making confidence 	<p><u>"Reconciliation"</u></p> <ul style="list-style-type: none"> * Consult with nurses on progress * Determining what is normal progress * Self doubt resolved * Acknowledge continual learning process * Need experiences

CHAPTER 5: NAVIGATING THE CHALLENGE

The crux of grounded theory methodology is to elevate data elements to a theory which describes the main sociologic process of the participants. For this group of participants, the *process* can be described as “Navigating the Challenge,” with the *outcome* of becoming a “Critical Care Nurse.”

“Navigating”

The term “navigation” typically refers to the use of landmarks, position of celestial bodies, and maps to get from one point to another. Additionally, wayfinders might seek the advice from an experienced navigator as to which way is the best ways to *safely* and *efficiently* reach their destinations. In all cases, navigators use external cues to determine their own position.

One of the most striking findings of this study was the extent to which the socialization process was internal to these individuals. Indeed, this internalization was the major underpinning of the socialization theory for this phenomenon. While there were vivid descriptions of unit culture and intense interpersonal interactions, the importance of those experiences was interpreted by participants in terms of how each affected their own progress and learning--“their position.”

For example, in the most challenging phase of the socialization process “Disengagement/Testing,” participants not only struggled with understanding the gravity of different levels of abnormal findings, but also wrestled with when to communicate those findings to another member of the health care team--usually the physician. Although participants needed to understand the gravity of

abnormal findings to provide competent patient care, comprehension of the seriousness of the problem marked the attainment of a new critical care skill. Further, determining when to phone the physician was often a learned behavior based on consultation with other nurses who “knew” what each physician wanted. In this sense, preceptors and nurse colleagues became “navigational advisors,” making suggestions, or giving cues as to what was expected in a particular situation. When there was an obvious crisis for the patient, participants knew they needed to phone the physician, but in situations where the criteria to call were not so obvious, decisions to phone the physician were based on making sure a phone call was made so the participants did not experience ramifications from not calling. Here, experienced nurses could minimize the potential dangers for the new nurse.

As wind gusts, or unexpected storms may precipitate changes in the navigation strategy, each phase of the socialization process signaled a change in expectations for participants. The challenge to participants was to determine what the new expectations were and what behaviors they needed to demonstrate to progress to the next phase. In the “Welcome to the Unit” phase, participants were expected to be more passive learners, to absorb their environment, and to be guided through the problem solving process. However, in the “Disengagement/Testing” phase, participants were expected to prioritize with less assistance, to master the problem solving process on their own, and to take increase responsibility for their own orientation processes. In the “On My

Own” phase, participants had to set their own expectations—a very different experience than having externally predetermined expectations.

Though participants had similar trajectories through the process as a whole, each had to negotiate a myriad of sub expectations as required by their colleagues, in particular, their preceptors. Some preceptors required independent behaviors to be shown earlier in the “Disengagement/Testing” than others. In this phase, preceptors were characterized on a continuum from coach to evaluator, often shifting from one end to the continuum to the other based on the needs of the participant. Because of preceptor variances, the *level* of expectations across participants could differ. Therefore, while some new nurses could often rely on peers going through the same process at the same time to help them manage the general process, each individual had additional navigational issues with which to contend because of preceptor and unit variances.

The Composite Experience

The purpose of this section is to illustrate the typical socialization process of “Navigating the Challenge” as experienced by the participants in this study. This description includes key encounters of all the participants involved.

Aspiring critical care nurses decide to enter the critical care setting because they are eager for a new challenge. They believe critical care nurses to possess a special knowledge which is valued by other nurses, health care professionals, and society in general. They are eager and motivated to learn new skills and anticipate a rigorous journey as they begin their new career path.

They anticipate being “one of the best” when they finish the experience and believe their new skills will make them more marketable as the nursing profession becomes more and more business oriented.

As new nurses begin their journey, they undergo a general hospital orientation, if they are new to facility, and some “core” critical care classroom work. During this time, they are oriented to some of the details of their work: different and intense documentation, critical care technology, and basic critical care concepts such as hemodynamics, ventilator management, and codes. These classroom orientations often last one to two weeks and are overwhelming in terms of information. Because of concerns over cost-effectiveness, individual class time is rare. Class often takes place in an educational services setting, away from the critical care units, and with a group of other aspiring critical care nurses at differing skill levels. New nurses begin to meet one another during these classes and often form a peer group for support. Class work after this initial period continues on a somewhat sporadic basis.

After a basic classroom orientation, new nurses enter their respective units to begin their preceptor experiences. The preceptor experience is referred to frequently during the classroom experience, and extensive orientation manuals exist to guide preceptors and new nurses. The preceptoring experience marks the first patient care contacts for new nurses and is almost hypnotizing in terms of gravity of illness, magnitude of technology, and intensity of care. Even nurses who were very skilled in another area of nursing are often perplexed about where to begin with these patients. In the background, are a

variety of beeps, buzzes, and other unfamiliar noises add to environmental stimuli.

Preceptors, understanding the bewilderment of new nurses, work to mediate the stimuli by creating a nurturing environment where explanations are readily provided and patient care occurs wholly at the direction of preceptors. Preceptors “break down” the patient so the care is seen as more manageable and attempt show new nurses how their previous skills fit into the new skills they are learning. While new nurses meet other unit members, the relationships with preceptors are the primary, insulating relationships. Preceptors act as agents for the new nurse.

As shifts pass, preceptors allow new nurses to become more independent in their care as comfort increases. Still preceptors remain nearby to provide care that is forgotten or if new nurses find themselves behind in the organization of their patient care. The process of allowing more and more independence occurs until approximately one to two weeks before the formal precepting relationship is to end.

When the end of the orientation process is near, preceptors implement a testing process by which new nurses are left to organize, prioritize, and care for a normal patient care assignment. This is often an enlightening, but traumatic time for new nurses as they find they are often able to provide basic, safe care to patients, but realize how much they depended on their preceptors for the organization of patient care. New nurses leave a nurturing environment where they feel good about patient care, to an environment where they are being

evaluated. New nurse find they have much to learn, and even experience some of confidence.

After the seemingly hopeless valley of burdens, new nurses find a second burst of energy which propels them into assuming more responsibility for their learning. They recognize where they need more knowledge and actively seek it from colleagues and books. This behavior is recognized as essential because they understand their preceptors are no longer available to them for every single question, and will be less available as the new nurses are on their own. A couple of shifts of care organization, successful performance of skills without preceptors, and problem solving without preceptors all boost new nurses' self confidence as they are "set free" from the bonds of orientation.

Despite the improving optimism of new nurses, they are humbled by the recognition they still have much to know and learn. New nurses have learned to gain support and information from other expert nurses on the unit, and have ascertained from colleagues that it will take between six and twelve months to attain a level of comfort in the critical care setting. Yet, the self doubt of the new nurses' ability to succeed has disappeared, and they understand the value of experiential care to bridge the gap between their current comfort and knowledge levels to their desired comfort and knowledge levels.

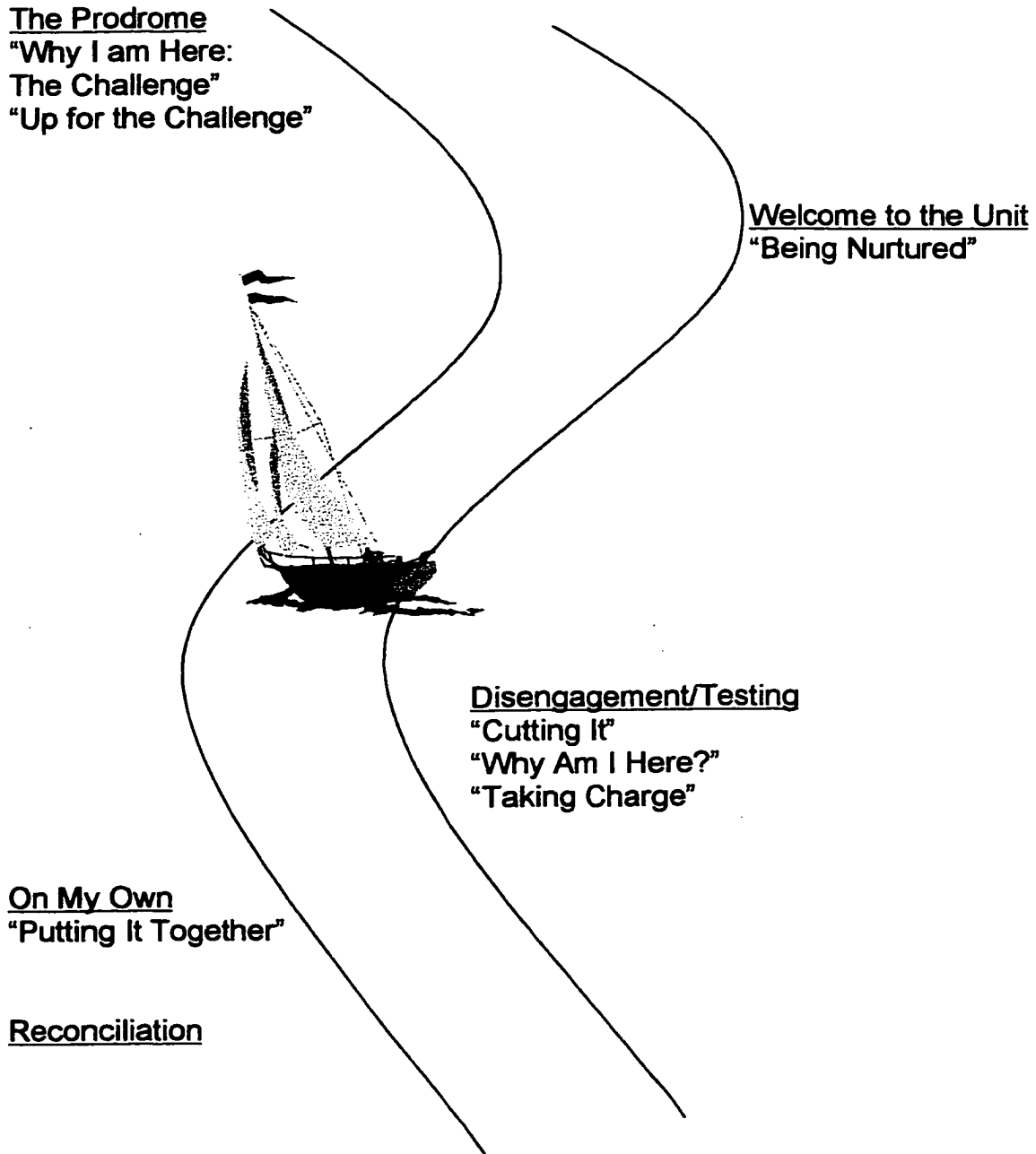
Am I a Critical Care Nurse?

New nurses understand they have acquired much knowledge and skill in their initial four to five-month journey of the socialization process; however, they register disappointment in their actual comfort versus their anticipated comfort.

While new nurses are satisfied they have completed the orientation process successfully, they believed they would be more socialized and comfortable by this point in the process. This prevents new nurses from feeling as though they have achieved "critical care nurse" status. The journey is still being navigated: It is not yet complete. Figure 13 depicts the theory "Navigating the Challenge."

Figure 13

"Navigating the Challenge"



AM I A CRITICAL CARE NURSE?

CHAPTER 6: RESULTS OF RESEARCH QUESTION #2

This chapter is devoted to the results from the second research question which guided this study. To refresh the reader's memory, the second research question was: From the participants' views, what factors play a part in the socialization process for new critical care nurses?

Uncovering the Keys to Success

During the last interview, participants were asked what the most important factor was in the first four months of their orientation. Overwhelmingly, participants identified the precepting relationship as key to their perceived success. Even those who did not have a desirable precepting experience postulated how much better it could have been, had they had a "good" or consistent preceptor.

Looking for Good Preceptors

As indicated above, participants perceived the precepting relationship as critical to the socialization and orientation process. Preceptors were expected to be not only teachers, but role models as well:

"Having a good preceptor is everything . . . a preceptor needs to be a good role model."

"Preceptors should *want* to precept and enjoy teaching . . . those are the only people who should be preceptors. . . . A good preceptor explains things in a way you can understand . . . they constantly pull out the things you need to know."

Nurses who did not have the desired preceptor experience, whether they were successful in the socialization process or not, also described their

perceptions of the preceptor relationship. One is left to ponder their perceived feelings of inadequate preceptoring experiences:

“I think I could have been successful with the right preceptor.”

“I think there should be more respect for the orientation process . . . for everyone . . . having one preceptor is very important.”

Determination

While many participants believed their experiences were more externally controlled, others felt the internal drives within the individual to be more relevant to getting through the process. In the cases where internal drives were more significant, the nurses were both experienced nurses and confident in their skills. The opposite is true of the nurses who identified preceptors as core to success. While no generalizations can be made from this study, this phenomenon is a potential area for further investigation: “What are the characteristics of nurses who will be more internally driven versus nurses who are more externally driven?” The issue behind answering this question would be to then determine how orientation programs should differ when motivational drives differ.

“Confidence and determination are what gets a person through an experience like this . . . determination alone got me through.”

“I see it in myself . . . the determination . . . the motivation . . . and I’m willing to learn from my mistakes.”

In related discussions concerning participant characteristics, last interviews consistently turned into participants’ reflections on how they successfully navigated the early processes of critical care nurse socialization.

Participants began to describe their own characteristics which they believed facilitated them through the past four months of their orientation. Upon listening to these descriptions, the investigator determined it would be an opportunity to explore participants' notions of which characteristics would make for a "good" critical care nurse. In order to uncover those characteristics, the investigator asked the question in terms of its relevance to administration: "If you were the nurse manager, what characteristics would you be looking for if you were hiring nurses to critical care? What questions would you ask?" The results of those probing questions are below:

"I would ask them how they handle dying and high stress situations. . . . They also have to be able to ask for help and give help. . . . I would ask them if they are ready to study a lot and learn a lot."

"I would be leery of hiring new grads. . . . A unit needs some over achievers, but too many causes ego wars. . . . They have to be honest, willing to be responsible, have nursing background, but also have some hobbies . . . good support systems are necessary."

"I would look for people who can critically think, who can think on their feet, who are motivated and continually want to learn . . . they have to want a challenge. . . . There has to be away to sort out people who are just going through the motions."

"They have to have a willingness to learn, be able to take criticism, and have a willingness to go after and get experiences. . . . I think new grads need experience . . . you have to have some knowledge base."

"You have to want to be this type of nurse . . . you need determination, and have to be willing to learn from your mistakes."

In some cases, these are obvious traits any nurse manager would desire, but participants describe the characteristics under determination, to be even more crucial in critical care settings. The gravity of illness of the patients and the knowledge requirements are seen as much more intense than many other areas of nursing.

CHAPTER 7: IMPLICATIONS AND DISCUSSION

This chapter is devoted to administrative, educational, practice, theory, and methodological implications. Though there is some overlap between these categories as they pertain to new nurse socialization, core issues are identified and put into perspective in relationship to this study. Sections on implications for investigators culture, and significance are also presented.

Administrative implications center around orientation cost as well as implications for hiring. Educational implications relate strategies that facilitate the learning process in new nurses such as teaching approaches. The impacts of the socialization and orientation processes on the practicing new nurse, especially as they influence clinical decision making, are discussed in practice implications. Relevant theoretical implications are discussed, in particular, ritual theory. Cultural implications, as introduced in Chapter 3, are reconsidered. Implications for investigators who wish to study this type of phenomenon are addressed. Finally, the significance of this study is delineated.

Administrative Implications

Administrators are not only concerned with the cost-effectiveness and success of orientation programs, but they also need consistent ways to evaluate and track costing of such programs. Additionally, administrators often search for ways to identify the right employee to hire, and efforts to retain employees once hired.

Related Literature

Messner, Abelleira, and Erb (1995) propose using an orientation matrix and a separate pay class for all new nurses in order to implement a new orientation process and track orientation costs based on rank, experience, and productivity. As a result of this system, nurse administrators were able to track costs more effectively, improve the satisfaction level of new nurses due to increased individualities of the program, and better adherence to budget. Nurse administrators were also able to more soundly project orientation needs for the next budget cycle.

In 1992, the American Association of Critical Care Nurses (AACN) delineated critical care competencies. One study investigated nurse educators' and critical care nurse administrators' perceptions of these competencies (Port-Gendron, Simpson, Carlson, Vande Kamp, 1997). The conclusion of the authors was that there was sufficient agreement between educators and managers in relation to the AACN competencies to incorporate these competencies into nursing curricula and hospital programs. In the context of "traditional" versus "competency-based" orientation programs, Flewellyn and Gosnell (1987) compared the cost-effectiveness of these two methods. The traditional approach included preplanned, scheduled programming including classes, self-learning, and unit practice, while the competency-based method employed classes, self-learning, and specific learning experiences to meet outcome criteria. The results showed that the competency-based program required

nearly double the cost of traditional programs, with instructor time bearing much of the responsibility for increased cost.

In 1988, Mooney, Diver, and Schnackel reported on the efficacy and cost-efficiency of a clinical preceptorship program in an intensive care setting. The authors also delineated the criteria for preceptor selection: commitment of one year to the role, demonstrated proficiency in clinical and interpersonal skills, ability to serve as a role model, attendance at preceptor workshop, and willingness to assume the shift rotation schedule of the orientee. The preceptor had responsibility for assessing the needs of the orientee, planning and implementing an orientation program on the unit, and evaluating the performance of the staff nurse. Noting increased satisfaction with the preceptor program over the more traditional approach, the authors also acknowledged a reduction in orientation program costs.

Bethel (1992) presents an alternative method for cost-analysis in preparation for a comparison evaluation of traditional and competency-based orientation as well. Unfortunately, the results of cost-efficiency comparison for the two methods were not reported in the same article nor in later published literature.

Competency-based tools have been abundant in the literature since the early 1990's. Tools defining competency in critical care areas have been published in full (Peterson, 1991; Hudgins, 1991a; Hudgins, 1991b; Hudgins, 1991c). Still, the literature is not clear on the new nurse benefit, nor the cost-

effective benefit of competency-based programs. Furthermore, indirect claims of improving nurse retention have not been substantiated.

In a different approach to new nurse socialization and retention, Decker (1985) used path analysis to determine the relationships among education, length of experience and interpersonal work environment on person-role conflicts, job satisfaction, and retention. Decker found that interpersonal factors determine the amounts of person-role conflicts and job satisfaction; while education and experience have direct effect on propensity to leave. Decker recommends opportunities for advancement to improve job satisfaction such as clinical ladder programs, but concedes there is little organizations can do in their retention efforts considering education and experience are the determinants for leaving. However, although Decker does not recommend such, one might conclude education and experience to be factors to contemplate when hiring new nurses.

Contribution of this Investigation to Administrative Issues

While cost-effectiveness of types of orientation was not an intended focus for this study, participants described their dissatisfaction with the standardized approach to all levels of new nurse orientees. Hospitals leaned toward competency-based programs and participants were often given an orientation manual with a list of competencies to be achieved at various points throughout their orientation period. Orientation schedules varied in length of time, mostly in relationship to participants' prior experiences. Typically six to ten weeks of orientation was completed before participants were "on their own." The number

of competencies to be achieved by the end of the orientation period was the same whether the participant oriented for six weeks or ten weeks.

With literature calling into question the cost-effectiveness of competency-based orientation, and new nurse displeasure over the lack of an individualized orientation approach, it is surprising how many facilities strictly adhere to this type of orientation. More investigation concerning the cost-effectiveness and efficacy of different orientation designs are warranted.

The most striking contribution of this study to administrative implications relates to the results on desirable critical care nurse characteristics. With critical care nursing requiring longer orientation periods than some other types of nursing, hiring a nurse with poor fit, or the loss of a nurse, both cause a loss in the critical care nurse administrator's budget. If one calculated the orientation cost based on the new nurse's salary alone, exclusive of educator and materials cost, the calculation would yield the following:

New nurse salary	\$14.00/hr
Hours per week	40
<u>Weeks of orientation</u>	<u>6 to 10</u>
Total	\$3360-5600

Critical care nurse administrators contemplate two factors related to the cost of orientation: 1) the length of orientation, and 2) nurse retention during and after orientation. The length of orientation is a consideration for the obvious reason that the longer the orientation, the more cost involved. However, if a unit has experienced any substantial turnover, the nurse administrator is also eager to expedite orientation in order to improve staffing. Low raw numbers of staff

during high census times causes more overtime to be paid. This is an obvious drain on the nursing budget, contributes to low staff morale, and may contribute to staff turnover exacerbating the problem. Consider the impact of shortening orientation for one nurse just one week in this conservative scenario:

Salary of new nurse X hours covered by new nurse
 (\$14/hr X 40 hours) = \$640

Compare with:

Salary of experienced nurse receiving
 overtime pay X hours paid overtime (OT)
 (\$16/hr X 1.5 OT X 40 hours) = \$960

Savings to budget with new nurse = \$320/week

In this scenario, which uses realistic figures for the population and area served by this study, cutting orientation one week per new nurse would result in a \$320 savings for one nurse, \$640 for two nurses, \$960 for three nurses and so forth. Nurse administrators must carefully weigh the readiness of the new nurse and the budgetary constraints under which they operate. Is the \$320 savings worth it if new nurses make serious errors, or become so overwhelmed they leave causing a potential \$5600 loss in orientation costs?

Cardona and Bernreuter (1996) place orientation costs of a new critical care nurse at \$5300 and use that figure to make a case for graduate nurse overhires. Though a cost analysis for that study supported graduate nurse overhires, this strategy is not likely to become practice due to changes in the licensure examination. Prior to the licensure examination being computerized, graduate nurses waited at least six weeks before they could sit for the exam.

Another six to eight weeks was required for processing the exam and delivering results. This meant that a new nurse could lose twelve to sixteen weeks in the licensure process—enough time for even a critical care orientation to be completed. The risk for the hiring unit was the possibility the candidate would not pass the exam. However, with national pass rates near or at 90%, nurse administrators were willing to gamble.

Currently, computerized licensure may occur within four weeks of graduation. Nurse administrators in central and south-central Indiana have consistently chosen to wait the four weeks to hire only new nurses with licenses in hand.

In this study, many participants left day orientation to fill a vacancy on the night shift. Once there, participants described the night shift as full of new nurses just like them. They also noted that the night shift was tired of orienting and being responsible for new nurses. In some units, the night shift was a “no person’s land,” leaving new nurses wondering how they would make it through each night. Nurse administrators must contemplate possible consequences of personnel policies. For example, allowing nurses with more seniority to have shift priority creates the situation where the majority of new nurses are staffing the night shift. Though a less than desirable circumstance occurs on the night shift, should nurses who have maintained their loyalty to a unit, lose this valuable benefit? Consider the implications on a unit if the nurse administrator repealed the shift priority policy. Most certainly, if some experienced nurses were forced to return to nights, turnover of these valuable nurses may occur. Often the nurse

administrator must search for the lesser of two evils. Many new nurses viewed the night shift assignment as “doing their time” until a day shift position became available. Unfortunately, on some units, day shifts positions becoming available occurred much too frequently, indicating rapid staff turnover.

While the above issues may contribute to new nurse retention issues during and after orientation, nurse administrators also seriously deliberate over who is the right nurse to hire in an attempt to reduce staff turnover. Clearly, the ability to select the “right” new nurse is not only beneficial in terms of staffing, but also in terms of quality patient care.

Who is the “right” nurse? How would the nurse administrator know when the “right” nurse comes along? Participants in this study described characteristics needed in a critical care nurse which are discussed in the results of Research Question #2. In most instances, participants examined the characteristics they themselves had which they perceived to contribute to their success. Though the ability of new nurses to critically think was a crucial point in their progress through the socialization process, participants noted more work ethic characteristics than intellectual characteristics as important factors for nurse administrators explore during the interview process. From participants’ perspectives, and assertive attitude toward learning, the ability to take criticism, and sheer determination are keys to success. While participants did not directly discuss intellect, they identified the “Putting it Together” phase as crucial for the critical care nurse role. This caused the investigator to ponder the reasons why intellect was not put forth as a characteristic needed in critical care nursing. The

investigator is left with two explanations: 1) Intellect is an assumed prerequisite; and 2) if it so happened participants failed later, they would not want to be considered unintellectual. Though participants, by the end of the four-month interview process, felt successful, all acknowledged they had much more to learn. The vulnerability phase was mostly over, but not *completely* over.

Upon soliciting facility support for this study, the investigator was reminded on several occasions that job redesign could influence the data collected for this study. Indeed, Mark and Hagenmueller (1994) caution the nurse administrator to consider the repercussions of job and work redesign on new nurses and new nurse orientation. The current study did not find the work redesign of units to be a significant topic during interviews. Participants were often aware that some redesign initiatives were occurring, but tended to revert the interview conversation back to their own process. In essence, job and work redesign, as well as other issues, were only important if they affected the progress of the participant. In this study, job and work redesign were quite peripheral to participants considering their concentration was on their own successes.

Educational Implications

This section will focus primarily on educational services within hospitals which are responsible for the successful orientation of new nurses. Some literature, though, concerning students, role transitions of students, and student socialization is also applicable and will be discussed as well.

Related Literature

The literature on orientation programs is fairly substantial. Much of the literature, however, is not research, but reports on individual orientation programs. The review will start with orientation programs in general, then move to a discussion on the most proliferative subject—preceptorships. From there, socialization and role transition literature is discussed, followed by orientation program evaluation.

Literature on orientation programs in general. Concerns about the inadequacy of orientation programs surfaced after a 1988 survey by the journal *Critical Care Nurse*. As reported by Alspach (1990), critical care orientation programs were found to be “. . . inadequate, ineffective, and inefficient . . .” and to “. . . represent a major contributing factor to the shortage of critical care nurses” (p. 10). Alspach notes four important areas which constitute an effective and efficient critical care program: educational approach, instructors, preceptorship process, and supplements to the preceptorship. Within the educational approach, clear program outcomes, a flexible instructional process, and resource economy were benchmarks for a successful orientation program. Criteria necessary for effective instructors were that they had to be present in an institution and had to be prepared in critical care, education, and adult education. Preceptorships were effective if they had a sufficient supply of preceptors, well-prepared preceptors, and adequate availability of preceptors for each shift. Preceptorships also needed to be complemented by an organizing framework, integrated classroom instruction, and follow up education after orientation.

The survey highlights a problem discussed in the administrative section of this report: lack of research on orientation designs. Dunn (1992) agrees with this assessment. Dunn outlines and discusses the possible components of orientation along with each component's benefit, and situates the orientation process in the context of moving a new nurse from that of novice nurse to that of competent critical care nurse. The case is made for substantiating which orientation components facilitate this transition from novice to competence. One study compares the lecture teaching method to a self-paced learning method in critical care orientation finding no difference in performance in one content area (Cunningham, 1988). Cunningham's study was a start in the evaluation of orientation teaching techniques, but appears as one of few, if not the only study published using research to document the effect of differing orientation teaching techniques in critical care.

There is support that by simply paying attention to the orientation process, rewards will be reaped. Suhy and Burson (1991) describe a strategy where they assessed, designed, and implemented an orientation program for a cardiovascular intensive care unit. The authors identified a problem with the current orientation process, set goals for the new process, then designed a program to meet the goals. The article provides a recipe for other critical care areas in their attempts to improve orientation.

Finally, Welch and Stull (1991) discuss business practices outside of health care that facilitate new employees. The Feldman model is presented as it applies to hospital staff orientation processes. Again, the report is not research,

but a recipe approach for health care facilities in considering how to rejuvenate the orientation process.

Internships and fellowships. Before discussing preceptorships as a component of orientation programs, two different orientation approaches have been proposed as alternatives to traditional orientation approaches: internships and fellowships. The internship process discussed by O'Friel (1993) is a twelve-week program focusing on new graduates deemed successful in terms of retention for bachelor degree nurses, policies, and practice. This internship was not specific to critical care; however, the fellowship program presented by Sakallaris (1991) featured new graduates in intensive care. Though the program was designed for new graduates, other registered nurses were eligible if they had less than one year of nursing experience. The fellowship consisted of a ten to twelve week orientation focusing on theoretic knowledge, psychomotor skills, and holistic care. The author's conclusions following evaluation of the program were that the fellowship was a mechanism to improve retention and to assure competent critical care nurses, although salary costs were increased (Sakallaris, 1991).

Literature on preceptors and mentors. There are three areas of literature concerning preceptorships and mentorships: 1) use of preceptors/mentors in undergraduate nursing experiences, 2) use of preceptors/mentors in new nurse orientation programs, and 3) selection criteria and programs to prepare preceptors/mentors.

Several studies have demonstrated and evaluated the effectiveness of preceptoring/mentoring programs for use in undergraduate nursing socialization; in particular, senior student socialization into the professional role (Anderson, 1991; Asselin & Barber, 1991; Byrd, Hood, & Youtsey, 1997; Goldenberg & Iwasiw, 1993; Johnson, 1998; Kinley, 1995; Ouellet, 1993; Reutter, Field, Campbell, & Day, 1997). Nursing student preceptor programs have been linked to increased professional socialization (Goldenberg & Iwasiw, 1993; Johnson, 1998; Oermann & Provenzano, 1992; Ouellet, 1993) and purport to bridge the practice-theory gap (Ouellet, 1993). However, Green (1988) found that student nurses moved from a faculty role model/professional socialization background, to an experienced nurse role model/bureaucratic work environment within three months after employment. Green links this change in role models to the degeneration of a professional model and the perpetuation of a bureaucratic work ethic.

Student nurse preceptor programs have been examined for the participants' perception of important factors during the preceptoring experience. Byrd, Hood, & Yountsey (1997) found that student nurses placed more value on the preceptor's knowledge of the preceptoring process and compatibility, while preceptors emphasized the importance in ability to give and receive constructive criticism and clinical competence. The investigators highlight the implications of the differences between the student nurses' perceptions and expectations, and the preceptors' perceptions and expectations, by calling on program designers to be aware of such incongruences.

Discrepancies also were found in another study involving senior student nurses. Anderson (1991) discovered that student nurses preferred role modeling as an effective preceptor teaching strategy, while preceptors viewed this strategy as least instrumental. Other teaching behaviors valued by students were: decreasing procedural complexity, coaching through difficult skills, corrective feedback in a non punitive manner, use of humor to minimize anxiety, storytelling of preceptors' own embarrassments, and consistent patient assignments to facilitate prioritization skills.

Using unit-based nurses to facilitate new nurse orientation and socialization is abundant. These nurse facilitators come under such names as preceptor, mentor, role model, and even buddy. Most likely the strongest study to date, preceptor programs were linked to increased satisfaction, social integration, professionalism, retention, and performance in new nurses (Bellinger & McCloskey, 1992). Further support in preceptor programs is shown in the areas of leadership, teaching/collaboration, planning evaluation, and interpersonal relationships/communication (Clayton, Broome, & Ellis, 1989).

Mentorships may be yet another way to achieve desirable outcomes such as role socialization, increased self-worth, job satisfaction, professional growth, decreased stress and retention (Gunderson & Kenner, 1988; Stachura & Hoff, 1990). Gunderson and Kenner (1988) provide a description for designing and implementing mentorships programs to socialize newborn intensive care nurses in the context of a role development theory. The roles of mentors are as defined by D. J. Levinson (Gunderson & Kenner (1988): 1) teacher for intellectual

development, 2) sponsor to facilitate entry, 3) host to initiate into new values, 4) exemplar to serve as role model, and 5) counselor to provide support. The authors provide instructions for the mentor at each stage of role development and challenge newborn intensive care programs to institute mentoring as the way to socialize new nurses. Stachura and Hoff (1990) make the following recommendations after the implementation and evaluation of their mentor program: 1) The mentoring program should be voluntary on both parts (mentor and protégée), 2) goals of the mentoring program should be clear, 3) communication between the mentor and protégée should be intense at first, 4) the mentoring program should commence and end with clear markers, and 5) administrative support from all levels is necessary.

Modic and Bowman (1989) appear to be among the first of a few authors to set forth criteria for preceptors. Besides a minimum length of tenure in the facility, preceptors also had to demonstrate knowledge of nursing policies, competency, effective communication, contributions to own profession growth, and successful completion of a preceptor course. The authors also lay the foundation for preceptor role responsibilities including collaborative planning of the orientation program and evaluation of the orientee.

Carroll (1992) postulates the successfulness of a preceptor program to be dependent upon matching the personality styles of the preceptor to that of a new nurse. Carroll provides a listing of possible learning style assessment tools, but advocates the Gregorc Style Delineator (Carroll, 1992) due to its ability to detect both learning styles and personality attributes.

Though many concentrate on the preceptoring relationship as core to the socialization process, one study finds that others influence the process as well. Thomas, Bounds, & Brown (1991) found that other co-workers, supervisors, family, friends, physicians, and patients also contributed to the process. The investigators call upon preceptors and supervisors to increase their visibility as role models to enhance the possibility of creating a more desirable employee.

There is one study that questions the value of the preceptor's expertise. Dufault (1990) tested the effect of eight variables for predictive value on novice nurse role mastery. Of the eight variables, novice pretest role mastery, unit role socialization, unit role mastery, and unit job satisfaction were predictors of role mastery. Conversely, preceptor role mastery, head nurse role mastery, previous work experience as an aide, and participation in bicultural training were not predictors of novice nurse role mastery. This study suggests that unit stability, in terms of culture, plays a significant role in new nurse role performance.

Evaluating orientation programs. This section highlights three research studies that demonstrate three different models for evaluating orientation programs. Straub & Mishic (1997) describe the evaluation of the program Performance Based Developmental System (PBDS) hospital wide. The PBDS is a commercially developed orientation program. The investigators use the Improving Organization Performance (IOP) model which is an outgrowth of the Joint Commission of the Accreditation of health Care Organization (JCAHO) standards from 1995. The steps in the model include design, measure, assess, and improve. The design of PBDS included areas of technical skills,

interpersonal/communication skills, and critical thinking ability. Measures and methods were set forth, and data were analyzed using Statistical Analysis Systems (SAS). The investigators were able to pinpoint from the data analysis areas where performance was satisfactory and areas where performance was less than satisfactory. Improvements were made based on a comprehensive systematic analysis, including improvements to PBDS.

Kidd and Sturt (1995) used data from employee exit interviews, preceptor interviews, and orientation literature to develop an emergency nursing orientation pathway. With more emphasis being placed on cost effectiveness and new graduate nurses entering the emergency area, the investigators deemed this orientation change necessary. Because the pathway was developed with evaluation in mind, statistical analysis of a pilot group of seven was easily attained. Early results showed orientees to progress to the highest level of proficiency in eight weeks. Both preceptors and orientees were satisfied with the pathway.

An evaluation protocol for a critical care nurse internship program is described by Ressler, Kruger, and Herb (1991). A written test, the Basic Knowledge Assessment Tool (BKAT), performance evaluations, and error/incident reports constitute measurement of success from the internship program. The investigators found that the internship program was successful not only immediately post program, but in a follow up measure as well. The study supports the collection of data at multiple points after the program to ensure program content retention.

Contribution of this Investigation to Educational Issues

Though the literature is abundant with concerns regarding orientation processes, the report on this investigation finds the orientation process itself to be an external, incidental process that participants navigate. As participants are socialized into their respective critical care settings, the structure of the orientation program seems to be inconsequential. It may be postulated that this is because orientation programs have been greatly refined over the past decade, so there may be little consideration paid to the structure. The orientation programs involved for this study all included an up front organizational classroom orientation, followed by unit specific classroom orientation, and ending with an on unit preceptor orientation experience which was interwoven with an occasional advanced classroom session. Orientation programs across participants for this study were consistent in their structure.

One complaint voiced about these orientation programs came from nurses who took their "critical care core" classes with experienced critical care nurses who were new to the facility. Nurses describing this situation were concerned that content was moving too fast for them to gain understanding, and felt intimidated by the perception they could be asking "dumb" questions. These nurses felt classes should be held with similarly skilled nurses, though they recognized the cost constraint in implementing this idea. Another complaint was too many skills were being learned at once. Isolating skills to achieve competency was a recommendation made to avoid the overwhelming feeling of trying to learn everything at once.

As addressed in the results for research question #2, preceptors bear the primary responsibility in new nurses' eyes. Perhaps this is the reason why there is so much literature concerning preceptorship programs. Participants' views support the literature which look favorably on preceptoring programs. In many cases, the preceptor relationship was deemed the most crucial part of the socialization process. Further, as discussed previously, those who did not perceive they had a desirable preceptor relationship either felt they could have been successful with the right preceptor or felt they would have progressed in skill acquisition much quicker than what was realized.

For the participants in this investigation, the orientation and socialization process was a deeply internalized operation. A great deal of self talk mediated thought processes for participants and is responsible for this internalization. Many external obstacles faced participants, yet these obstacles were assessed according to their impact on the progress of the participant. Though socialization often contains the criterion of "fitting in," this criterion did not seem nearly as significant as the participants' own assessments of their patient care successes. Participants seemed to gain the most confidence when they were able to problem solve a new and challenging situation. With these factors now illuminated, the goal of orientation/preceptor programs should be to role model problem solving in these situations and then to seek situations where new nurses can test their own problem solving abilities.

There also are implications for undergraduate nursing education programs. Because internship and fellowship programs may occur during

nursing school and not necessarily post graduation, nursing programs would be encouraged to develop programs with local critical care units in an effort to prepare student nurses who know they would like to pursue a career in critical care. Some students know early in their nursing education that they prefer critical care areas. Undergraduate courses, internships, fellowships, and work-studies with critical care units afford prospective critical care nurses additional education in the setting which could result in the following outcomes: 1) increased employment opportunities for the student, 2) increased recruitment power for critical care units, and 3) decreased orientation time to critical care units post graduation. Evaluation of programmatic opportunities such as this would reflect true collaboration between education and the service sector with the goal of enhancing the preparation of critical care nurses.

Practice Implications

The bulk of literature related to practice issues and new nurses relates to clinical decision making. In critical care settings, where patients are least stable, the extent to which a nurse can problem solve a clinical situation and the speed with which that process occurs may have a profound influence on the outcome for the patient. Though nurse competence includes adequate performance of psychomotor skills, it is quality of clinical decision making skills that separates good nurses from outstanding nurses.

Related Literature

One might believe that experienced nurses would always render clinical decisions with more certainty than novice nurses. However, one study found

experienced nurses to proceed with less certainty than novice nurses in cases where data were inconsistent (Tabak, Bar-Tal, & Cohen-Mansfield, 1996). While experienced nurses were more confident in their decision making capabilities in cases with consistent data presentations, they tended to go into a more formal problem solving process in order to generate a range of possible explanations for cases with inconsistent data. Moreover, experienced nurses were less secure in their conclusions in such cases of inconsistent data. The investigators explain this phenomenon in terms of ability to use schemas effectively. That is, novice nurses were less effective in their use of schemas to organize patient care than experienced nurses. Further, experienced nurses used schemas from past experience in their clinical decision making process which enhanced confidence in consistent data cases.

Jenks (1993) described the theme "knowing" as important to the development of clinical decision making skills. Subcategories of knowing include knowing about patients, which includes knowing about the patient and establishing personal relationships, knowing peer nursing staff, and knowing physicians. An underlying issue seems to be the concept of creating a trusting environment through interpersonal relationships.

The rest of the clinical decision making literature focuses on theoretical application of clinical decision making: introducing models and explaining how they are used to facilitate patient care decisions. Harbison (1991) presents the rationalist and phenomenological perspectives to the nursing process model to encourage the use of both approaches when educating about clinical decision

making. Jenkins (1985) makes the case for actively linking decision making theory to practice in educational programs. A hospital-based clinical decision making model is introduced and discussed, though not evaluated, as a means to improve decision making skills in new nurses (Harman, Wabin, MacInnis, Baird, Mattiuzzi, & Savage, 1989). Deficits in the implementation and evaluation of clinical decision making strategies are evident from the lack of literature in the area.

Nayak (1991) approaches clinical decision making from the perspective of reducing turnover. The investigator believes that critical incidents in clinical decision making should be analyzed with new nurses in order to lend support to the new nurse. The assumption is that positive work experiences promote feelings of accomplishment, while negative experiences induce a feeling of helplessness which may contribute to turnover. Kapborg and Fischbein (1998) found that disharmony occurred due to increased workloads and too much emphasis on paperwork, leading to decreased time with individual patients and increased personal stress.

Contribution of this Investigation to Practice Issues

Participants in this study were very concerned about the competence of their practice because of two reasons: 1) They comprehended the gravity of illness and risk for death which is affected by their care, and 2) their demonstration of competent practice determined whether they would be able to continue employment in the critical care setting. Again, participants' feeling concerning their nursing care practice was an internalized process. Participants'

feelings of worth as a nurse, and sometimes as a person, often hinged on their perceptions of whether they had a “good” day or a “bad” day. Good days were often marked by either a success at a new psychomotor skill, or an “ah ha” concerning the putting together pieces of a complex patient care situation. This study lends support to Nayak’s (1991) findings. Participants often used their journals and interview periods to debrief critical incidents and found this to be a helpful forum for doing so though the investigator could provide no counseling on the incidents. These debriefings also promote Nayak’s (1991) stance of critical incident debriefing for new nurses.

Concerning the study by Tabak et al (1996), new critical care nurses seem to make ineffective use of schemas due to their lack of experience in these situations and their inability to understand all the cues presented to them. A prime example is the use of the continuous electrocardiogram (ECG) as cues to the clinical picture. Participants expressed discomfort with ECG interpretation even at the termination of the study. This is a fascinating phenomenon. Though participants knew of the importance of the ECG in critical care, they knew they had backup in terms of other nurses to help them interpret the significance of the ECG, and they felt confident enough in the rest of their nursing care to make clinical decisions despite discomfort with ECG interpretation. Technology posed problems for participants, but they did not stop providing basic nursing care and did not stop making clinical decisions because of technological illiteracy. As participants became more comfortable with data afforded by technology, those

pieces of data were simply inserted into already existing data related to the patient's condition.

Data from participants in this study also support the findings of Kapborg and Fischbein (1998). Participants spent a great deal of time and energy learning not only patient documentation, but other unit paperwork as well. Many participants had to spend a day "learning the desk" which is the work of the unit secretary. Participants knew, however, that accurate paperwork was valued by their respective institutions and thus, saw accomplishment in their abilities to successfully document patient and unit care.

Theoretical Implications

This section concentrates on the contributions of this socialization study to relevant theories. The theoretical implications will center on four areas: Socialization theory, role modeling theory, decision making theory, and ritual theory.

Socialization Theory

Socialization is often defined as the process of how people attain knowledge and skills, as well as morals, values and attitudes of the group to which they are being exposed (Boyle, Popkess-Vawter, & Taunton, 1996; Christman, 1991; Coudret, Fuchs, Roberts, Suhrheinrich, & White, 1994; Feldman, 1976; Spickerman, 1988; Welch & Stull, 1991). Recent literature focuses on both nursing student and new nurse socialization in terms of role conception. The most recent literature review on nursing socialization occurred in 1983 (Conway, 1983).

Boyle et al, (1996) studied the socialization of new graduate nurses in critical care using a modified contingency theory of role socialization as a guiding framework. This framework identifies three stages of role socialization: anticipatory socialization, accommodation, and role management. The focus of the study was to compare experienced nurses to new graduate nurses across the accommodation stage at three and six months post initial employment. This study is designed to understand the needs of the new graduate in comparison to the experienced nurse who is new to critical care settings. Recommendations are to enhance precepting experiences, support systems, and assignment congruence in order to facilitate socialization of new graduate nurses into the critical care setting.

The implications of this critical care socialization investigation on socialization theory are significant. Socialization often refers to the new person's ability to "fit in." However, for the group of participants in this study, "fitting in" has less to do with fitting in as a team member, but rather, fitting in as the individual's own conception of a competent critical care nurse. This study in some ways supports the contingency models for role socialization in relation to the broader categories of anticipation, accommodation, and role management. Nonetheless, the theory generated from the data collected and analyzed in this study provides more relevant application to the phenomenon of early critical care nurse socialization because the categories and stories are more specific to critical care nurses.

The bulk of formal socialization theory relates to peer group socialization and family role socialization. Attempts to tie this critical care nurse socialization theory to a more expansive theory would need to occur after other studies on nurse socialization, other work socialization situations, with ties to work role and professional socialization. After the completion of similar grounded theory studies in these areas, perhaps middle-range and broad-range theories will evolve.

Role Modeling Theory

There is little to no research in nursing concerning role modeling and role modeling theory in relationship to socialization of new nurses. It appears that the bulk of literature that is similar to role modeling concerns preceptoring and mentoring. The potential for building upon role modeling theory with future studies in critical care nursing could be profound. In the last phase of this investigation, participants often identified an experienced nurse whom they would like to emulate. In essence, participants were alluding to role modeling. While in the early phases of the socialization process, participants analyzed themselves or peers in a similar situation, the analysis was done for the purposes of evaluating their progress. However, in the last phase of the process uncovered in this study, participants aspired to a much higher level. With the fear of performance failure mostly past them, participants looked forward to achieving what they originally set out to do: to be one of the best.

Previous recommendations to include mentorships in later phases of socialization are reiterated in this section because of their relevance to role

modeling. Instead of using the assignment process as it is implemented in the precepting process, it may be useful to encourage more “veteran” novices to select their own role model/mentor.

Although Benner’s (1984) work has significance in practice and educational settings, it also has relevance to role modeling. Through her descriptions of the stages of nursing ability from the lower levels (novice) to higher levels (expert), Benner provides powerful illustrations of the skills proficient and expert nurses possess. In relationship to role modeling, it is these proficient and expert nurses who would be sought to facilitate advanced beginners as they refine their critical care skills through experiential learning. Role modeling using Benner’s framework for new nurses after their fourth months in critical care settings, could prove to enhance facilitation of newer nurses to higher competence levels more quickly. The goal, as always, is to improve patient care. As more nurses achieve ability at proficient and expert levels, and the sooner they achieve it, there could be significant impact on the quality of patient care given.

An example of a new critical care nurse describing herself and an expert nurse in a critical situation. Though participants were not directly asked to provide their view of what an expert nurse was, one participant vividly described a situation where a more experienced nurse intervened in one of her patient care situations.

Participant: He was my patient and I was you know, I cleaned him that morning and he was the second person I saw . . . I was going to accept him because he was a

problem he was heading for a stroke and there was no indication that this was going to happen at all and I remembered coming to see him first because he was probably the most sick person that I had so I went in and he was in the bathroom so I went ahead and checked the other guy in his room and by then he had come out and he was complaining about a lot of abdominal discomfort; didn't look in a lot of pain but he said he was really constipated and tried to go to the bathroom and . . . and he was on a study drug which they told him would cause abdominal discomfort. So he thought he was just constipated and stuff and he didn't seem like overly distraught like that he was just uncomfortable and I told him, "I'll go out and call the doctor and see if we can get you some milk of magnesia or something else to get you." And I listened to him and I looked him over and he didn't seem you know anything out of the ordinary and I didn't do vitals on him because we have our PPAs come in and do vitals and a lot of times I do my own vitals but I hadn't done his and so I relaxed and I tried to call the doctor and I went back in to let him know that I had called the doctor. Well _____ was in there and she had set up his blood pressure to take and left. So I went over and it didn't read. A lot of times when people are in fib or if they're moving around then they don't take. By this time he was getting pretty . . . still uncomfortable and moving around and . . . he looked in a lot of pain. So I took his blood pressure and it looked kind of low. It wasn't super low yet but it was kind of low I think 100/77 and I looked and I said, "Well move on and call your doctor and let him know your pressure's a little bit low" and they still hadn't called me back. I called and called again then another nurse came up who worked on like a stroke team or something and I told her what was going on with him and she says, "Well are you thinking about a triple A?" And I said, "Well I don't think it's anything because I can't get anybody to answer me." She said, "Well, go on and page her" and I said, "But it says she's not here." So, I go back to his bed and he's just terribly uncomfortable and . . . diaphoretic. So I took his pressure again and it was like 90/60 and he was just dropping and by this point I was really getting nervous so then they (residents) came in and looked at him and they had his EKG and they looked at him and it was fine and it showed a fib. We gave him a fluid bolus then his pressure came back up a little and she said go ahead and give him another 500 ccs and we'll see how he does. So by that time

he had got a liter and it really didn't make that much, well his pressure came up a little bit but back into the 100s but in five or ten minutes it dropped like a rock right back down into 80. When it did that I'm not ACLS certified and I was in the room and I saw it come up 86/60 something and I was like I don't know what's going on but he's in trouble and there's something wrong and he was in excruciating pain by this time he was just said, "Can't you do something for me? Can't you do . . . ?" And I was just afraid.

Investigator: The first nurse that you had talked to you gave her some what you knew at that point and she started thinking triple A?

Participant: Well, she actually just came in and found that he was in pain. This was before his pressure really dropped and he was just 100s over which is more but you know sometimes people if he had been laying down or whatever . . . I mean she picked up on it right away and obviously she had a lot more experience with those kind of things . . .

Investigator: So what do you think was a good picture of what that looks like and how to handle it now?

Participant: I said I felt like I should have done something sooner because basically this all took place between 8 a.m. and 10 a.m. . . . The only thing I knew was that his pressure wasn't right and he was in a lot of pain. So I knew something was going on but I didn't know any of those signs leading together, you know. _____ was just like, "Well it's just something that you'll remember from now on the rest of your life." If I ever see somebody like that I will know exactly that there's some kind of internal bleeding because it was funny just that two or three days before that I hadn't been on the floor but on that same floor but on that same floor they had somebody have a spleen rupture. And it was giving the same kind of symptoms.

The investigator found this narrative of particular interest because it distinctly describes a situation where experience matters, and explains why new nurses who have reached the reconciliation phase believe that only experience can help them achieve the next level of nursing. The narrative also lends

support for continued mentoring past the formal orientation period, a recommendation made in Chapter 8 of this report.

Decision Making Theory

Though this study did not focus on decision making skills of new critical care nurses, decision making theory is presented here in relationship to socialization process and role modeling. Pesut and Herman (1998), described the Outcome-Present State-Testing (OPT) Model as new generational style of promoting and capturing clinical reasoning. The purpose of discussing this model in relation to this study is not to provide recommendations for promoting this clinical reasoning skill in critical care nurses, though doing so could be explored in future research. The OPT Model is presented here to examine the extension of the model in relationship to the juxtaposition of new critical care nurses "present-state" to their "desired-state" and the mechanisms devised to facilitate movement from present-state to desired state.

It has been proposed that the OPT Model has potential application in administrative practice (Pesut, 1998). It is now proposed that the OPT Model be investigated for its applicability to role modeling processes for new critical care nurses. The OPT Model could be used to expose new critical care nurses' desires in the acquisition of higher level competencies. By capturing the present state and desired state descriptions of the new critical care nurse, the role model can identify realistic expectations by the new nurse, and facilitate the means by which the new nurse might achieve the desired state.

Ritual Theory

Authors have implicated ritual theory in the socialization processes of new nurses (Bradby, 1990a; Bradby, 1990b; Laing, 1993; Tradewell, 1996).

Embedded in ritual theory are such concepts as gossip, rites of passage, and role identity.

Laing (1993) presented gossip as a possible contribution on the socialization of new nurses and their culture. The three functions of gossip, as purported by Laing (1993), are: 1) information, 2) influence or social control, and 3) entertainment.

Participants in this study examined cultural phenomena, such as gossip, purely in terms of how they impacted the socialization process. Certainly, new critical care nurses do not see gossip as an entertainment source, but rather, attempt to determine whether the gossip contains personally relevant information, or whether the gossip prepares them to understand power relationships. In many cases, participants processed pieces as gossip in very personal ways wondering if they were being gossiped about themselves, and particularly, whether they were receiving truthful feedback concerning their progress. Mediation of gossip in the company of new critical care nurses, is solely the responsibility of the people engaging in the gossip. Still, it is unclear what the direct and indirect impacts of gossip are on the socialization processes of new critical care nurses, but is yet another stimulus that new nurses must learn to navigate.

Bradby (1990a) relates status passage as a possible view of the socialization process where change occurs concerning social status. The socialization of new critical care nurses appears to be a microcosm of status passages which are not made readily apparent. In this study, the final rite of passage, the becoming of a critical care nurse, was not complete for all participants. Though participants did not doubt their ability to be a critical care nurse, at the end of the four months of study, most were not comfortable in saying "I am a critical care nurse." Bradby (1990a) found that occupational role identity occurred between six and ten months after entry. This study lends support that role identity often does not happen until after the initial stages of socialization.

Tradewell (1996) suggested methods by which organizations could use ritual theory to enhance the socialization processes. The rites were described as: 1) rites of passage or role transition, 2) rites of degradation or termination, 3) rites of enhancement or celebration, 4) rites of renewal or seminars, 5) rites of conflict reduction or reducing tension, and 6) rites of integration or strengthening of ties. Of these rites, the ones most applicable to the socialization of new critical care nurses are rites of passage, rites of enhancement, rites of conflict reduction, and rites of integration. In particular, this investigator finds rites of passage and rites of enhancement to be appealing in terms of marking important changes in status and recognizing accomplishments of new critical care nurses. Ritual theory might be seen as an administrative tool, but is also a tool that could be facilitated by the unit nurse educator as well as unit staff. The impact of rites

of passage on new nurse retention and nurse satisfaction would be an area for future study. Not only could these rites impact new nurses, but they could impact the overall culture of a unit.

Is entry into critical care a status passage? Based on the literature as described above, entry into critical care nursing constitutes a status passage. Influencing the decision on whether to enter critical care nursing is the knowledge and desire to make a change, in this case, a change to become what is perceived as a “better” nurse. The change requires an overall process of phases new nurses are required to pass before they actually achieve critical care nurse status. Even when the formal “training” process is over, there is more socialization left before most new nurses felt comfortable in calling themselves critical care nurses. It might be postulated that full status passage may only occur when a comfort level is achieved and new nurses achieve that magical six-to twelve-month threshold to which their colleagues have referred. Perhaps the full status passage occurs when new nurses have successfully and independently run a code. Perhaps passage occurs when new nurses have survived a “hell night” with a significant bond made with colleagues which will yield future war stories.

Currently, the early parts of the socialization process seem more highly ritualized than the later parts of the process. This diffusion of the ritual component may cause confusion in when new nurses feel comfortable in calling themselves critical care nurses. The moment where the passage has occurred

is yet to be determined, but if it can be pinpointed, a ceremony marking the transition might help new nurses recognize themselves as critical care nurses.

Culture

The details of the critical care environment were presented for the reader's consideration in Chapter 3. What are the cultural implications from this study? While it could be argued that culture is either the context for a phenomenon or a variable manipulable within a phenomenon, for this study, it will be explained why culture may be both context and a variable.

When considering culture as a context for events, one can see how new critical care nurses' experiences are shaped by the culture they are entering. Norms, values, and expectations are changed from what has previously been experienced; sometimes, these norms, values, and expectations are easily recognizable, and some are not.

As an example of a more explicit norm, visiting hours in the critical care will be analyzed. During orientation, new nurses are given information about the formal rules governing visiting hours. However, when observing the actual practice of nurses on the unit, some strictly observe the rules for visiting hours, while others do not. Further, a nurse may observe the visiting hour rules for one patient, and not for another. How do new nurses interpret and process such an inconsistency? Upon questioning staff, new nurses learn the informal norms concerning visiting hours. Perhaps someone has come from out-of-town on a special flight to see their loved one. Maybe the patient's death is imminent and family presence is of importance. Or, the possibility exists that some nurse's

individual values cause them to routinely violate the visiting hour policy. In any case, new nurses must learn which norms are lived and which are not.

Relationships and interactions were described in Chapter 3 as significant contributors to the cultural context. Interactions with physicians were presented as important in terms of how they affected new nurses in their socialization process. New nurses communicated to physicians about patients out of concern for their patients, but also as a requisite for completing an expected task in order to avoid a reprimand. This detachment of a patient care situation to a task management issue prompted a discussion between the investigator and her mentors. What were the relationships between new nurses and their patients?

The investigator revisited participant transcripts to review participant references to patients. While it was clear that participants were concerned with not harming their patients, few descriptions were provided concerning the emotional component of patient care needs. Indeed, decisions on which patients new nurses would be assigned were based on medical diagnoses, technology opportunities, and patient complexity. The investigator and her mentors postulated that this approach to patient assignments fostered a culture of viewing patients as objects or fields of experiences rather than as individuals. In essence, new nurses needed to have experiences with different types of patients and different technologies in order to gain experience and comfort. Emotional care was either not emphasized or assumed to be implemented, though it is unclear which was the case. For this purpose, it is recommended that the

provision of emotional care be examined with respect to socialization process for new critical care nurses and the impact on their practices.

In contrast, the culture of the unit, in relationship to how the new critical care nurse is treated, varied unit to unit and could be studied to determine under which circumstances the new nurse would be better socialized into the setting.

In some units, the new nurse/preceptor relationship is a highly valued one as evidenced by concern on the part of the preceptor, attention to the orientation process by the preceptor, care in the selection of preceptors, and administrative attention to the scheduling of new nurses with consistent preceptors.

Conversely, in some situations, less attention was given to the orientation process in general ranging from inconsistent preceptors to poorly prepared preceptors to a discarding of orientation materials. One participant termed this as "a lack of respect for the orientation process." The orientation process was often well designed by unit educators, but the extent with which it was implemented could vary significantly from unit to unit, and even, within a unit. Investigating the effect of these differing orientation process on the success of new critical care nurses would provide a fertile area for future research.

Methodological Implications

This study lends strong support for the use of qualitative methodologies, particularly grounded theory, in the study of nursing behaviors. The richness of data provided from the data collection techniques used in this study, provided the investigator with a well-rounded view of the socialization process for new critical care nurses. The methodology is not without drawbacks, however.

There are three issues which will be discussed in this section: time, attachment, and self-selection.

Grounded theory methodology is time consuming for the investigator. The data collection and data analysis phases of the study are labor intensive, to say the least. Participant observation may have provided additional information to the investigator concerning the socialization process. Yet, participant observation, in addition to participant interviews, participant journals, preceptor interviews, and orientation materials, could have caused the study to become unmanageable, and therefore, left undone.

The investigator's task is to select the techniques that allow pertinent data to be collected without causing undue burdens on those involved. Participant observation could have made the preceptor/new nurse relationship uncomfortable, and even alter the nature of the relationship although it could also have yielded some "objective" data. Nonetheless, it was deemed the participants' views were of most significance to this study, therefore, participant observation was not included.

The second methodological issue is that of emotional attachment. Because the investigator is the data collection tool and is responsible for the data analysis, her feelings concerning the study and its participants are significant. In the course of this study, the investigator found herself mentally "cheering on" the participants in the study. While she believes she did not outwardly express her emotions until the final interview was conducted, she does

acknowledge emotional attachment to participants, particularly for those who failed to “make it” and for those who seemed to struggle more than others.

At times, the investigator felt that a simple intervention by herself would have facilitated the new nurses' progresses greatly; yet, it would have been utterly inappropriate to do so. The investigator continuously reminded herself that she was not conducting the study for interventional purposes and that the natural courses of the participants were important to capture. She also reminded herself that presenting the results of the study was the appropriate forum in which to make positive and substantial change in the lives of future new critical care nurses. Because of the investigator's attentiveness to her own feelings and perceptions, it is felt this report is representative of the participants' experiences.

The last issue is that of self-selection. Though this is an issue across studies involving humans, the investigator paused to consider the implications of self-selection in her own study. Because of the time commitment required, some participants may have felt too much of an inconvenience would be put on their time demands. This issue alone does not seem to pose much of a problem. However, if the self-selected participants were more internally motivated than people who chose not to participate, findings may have been altered slightly, though it is difficult to determine in what manner the findings may have been different. Interestingly, some participants described their peers' movement through the same phases, though these descriptions were sporadic. The fact

that two participants were not successful, alleviated the investigator's concerns somewhat, but not all curiosities could be satisfied.

Significance

Investigators are responsible for providing context for their studies so others may determine the extent to which findings may be relevant to their particular areas. Such context is provided in the methodology section of this report. Investigators also are responsible for presenting the applicability and limitations of their research findings.

Because this study isolated the socialization experience across all nurses new to adult critical care areas, the theory and findings of this study are determined to be relevant to new nurses in adult critical cares. The theory is well grounded in a range of experience levels as well as age and gender. The methodological process is such that themes that are not consistently supported by data are eliminated or explained. Additionally, the trustworthiness criteria are met, and even exceeded, ensuring rigor in the methodological techniques. The implications, and, in particular, the recommendations are deemed appropriate for inexperienced, newly hired nurses in adult critical care areas.

The applicability of these findings to infant and pediatric intensive care nurses, emergency nurses, and other specialties may be limited. In the investigator's experience, nurses may be attracted to these areas for very different reasons than for adult critical care areas. Additional research would need to be conducted and compared to this study before generalizations could be made to these other special populations.

This investigation fills an important gap in the socialization literature in that it captures, free of an underlying middle range theory, the direct experiences of the participants. It provides the groundwork for future studies related to the socialization process.

Recommendations for Future Study

Recommendations for future investigations as a result of findings from this study have been interwoven into this report and are summarized here. The most critical questions still to be answered are: 1) When do nurses new to critical care feel comfortable enough to call themselves "critical care nurses?" and 2) What are the precursor and real time events that promote status passage to critical care nurse standing? Once these questions are answered, more advanced interventions can be made concerning the latter phases of the socialization process for the purposes of facilitating nurses from being beginner nurses to competent, proficient, and even expert nurses. Administrative, educational, and practice directions are presented in Table 6

Table 6

Recommendations for Future Investigations

Administrative	<ol style="list-style-type: none"> 1. Efficacy of competency-based programs in comparison to other program designs. 2. Effect of critical care nurse characteristics identified by participants in this study on retention and success. 3. Impact of shorter orientations on long term cost indicators. 4. Impact of unit and/or facility redesign on the socialization/orientation process.
Educational	<ol style="list-style-type: none"> 1. Comparison of individualized versus group classroom orientations on success and progress of new nurse. 2. Impact of orientation designs on success indicators. 3. Relationship between preceptor characteristics and success indicators. 4. Effect of preceptor/new nurse "matching" on success indicators. 5. Impact of university based nursing partnering programs with critical care units for internships on success indicators (and reduction of orientation costs).
Practice	<ol style="list-style-type: none"> 1. Impact of mentorships post orientation to facilitate from novice to expert competencies. 2. Use of OPT Model to facilitate movement from novice to expert competencies. 3. Emphasis of provision of emotional care on practice.

CHAPTER 8: GUIDELINES FOR CRITICAL CARE ORIENTATION

Initially, the investigator conceived that this section would contain a recipe for successful critical care nurse orientation. Indeed, a specific orientation design that guaranteed success would be heralded by critical care nurse managers and educators alike. However, as the data analysis evolved, it was clear participants did not desire such a recipe orientation: They needed individual attention. The focus of this section, then, is to provide some guidelines and suggestions for new critical care nurse orientation. The major areas addressed are: structure, preceptor experiences, preceptor selection, issues of new graduate nurses, and stress reduction. At face value, some of these guidelines and strategies may seem costly or inefficient. The investigator encourages, and even challenges, those who design and implement critical care nurse orientation programs to conduct thorough evaluations of their programs, including cost-benefit analyses in relationship to retention and satisfaction.

Structure

Participants from this study were ambivalent concerning their own orientation structures, and could not determine a more useful way of providing orientation. The exceptions were the participants who felt new critical care nurses should have classes separate from experienced critical care nurses, and avoid overwhelming new nurses by isolating certain learning experiences such as ECG reading. The main issue, however, appeared to be the lack of individually tailored orientation programs. Most likely, multiple skill level nurses are enrolled in the facility's critical care classes as a perceived cost efficient

means to deliver such content. New nurses in this study identified being “lost” in some instances, and revealing they would just have to learn this material later. One must question the efficacy of this method if orientations must be extended and the full benefits of quality patient care are not realized.

Based on data collected in this study, guidelines for orientation structure are:

1. Conduct a thorough skills inventory, including psychomotor skills, a critical thinking analysis, learning preference analysis, and past experiences.
2. Continue with theoretical and experiential learning experiences.
3. Tailor learning experiences according to skills inventory.
4. If using group learning experiences, assure similar competency levels--using Benner's (1984) levels of nurse competency may be very useful.
5. Use the most expert and stable staff or “shift” to provide experiential learning.

Preceptors

As identified earlier in this report, participants believed that the preceptor experience was most significant. Preceptors are the teaching tools in experiential learning and are new nurses' major facilitators in the socialization process. The educator's role is addressed first, followed by preceptor selection guidelines, and finally, educative techniques.

Though preceptors are typically a proficient or expert staff nurses, the preceptoring role by unit nurse educators should not be underestimated. In

some cases, the transition from classroom/educator facilitated orientation to experiential/preceptor facilitated orientation was disjointed. It was often the case that communication between educators and preceptors was not maximized in a way that would benefit the new nurse. Additionally, preceptors were not always aware of which classroom content the new nurse had encountered. It is proposed that the unit educator be designated a preceptor as well, with the educator providing the leadership for assessment and design of the new nurse's orientation program. The desired environment would be for the educator preceptor and unit preceptor to work in unison, with the overall orientation process being monitored by the educator preceptor. The role of administration is to provide the resources available to accomplish this relationship, namely, time.

Preceptor experiences are of utmost concern. Participants were more willing to change shifts to have a consistent, quality preceptor, than to change preceptors frequently simply to maintain an orientation schedule. Initially, participants desired one quality preceptor, but gained an appreciation for additional preceptors near the end of the orientation period. Even participants who did not have the desired experienced were able to identify this approach to preceptoring as the "best."

Not only is the structuring of the preceptoring experience important, but the qualities of the preceptor are equally, if not more important. According to participants in this study preceptors needed to:

1. Understand adult learning principles usually gained by a preceptoring class.

2. Understand the individual's learning needs and differences in individual progress.
3. Be able to make interventions or changes in design of the orientation program in order to successfully facilitate the new nurse.
4. Be willing and competent teachers, able to expose their own clinical reasoning skills.
5. Not have other responsibilities, such as being the charge nurse, while preceptoring.
6. Recognize when they needed a preceptoring "vacation" in order to minimize burnout.

Participants were concerned about unit turnover as it affected their orientation. Mainly, participants were concerned about number six, above, and how it would affect the progress of their own orientation. Additionally, many participants described night shifts being overwhelmed with newly oriented nurses and the burden it placed on the "more experienced" nurses (often nurses with only one or two years experience). Participants were concerned about the amount of assistance they would receive on the night shift acknowledging that while their formal orientation might be over, their informal orientation was in its infancy. Participants also were concerned about the quality of patient care being delivered on nights due to this phenomenon. In one case, a participant was told by a barely experienced night nurse that "Day shift treated and night shift maintained," meaning that the day shift was responsible for progressing the patient. In the era of managed care, every hour of treatment can make a

difference in the cost of patient care—nurse administrators should consider the consequences of an inexperienced, tentative night staff in critical care areas.

New Graduate Nurses

Most critical care areas recognize the special needs of new graduate critical care nurses and take extra care to ensure a successful orientation process for new graduates. Therefore, this investigation did not reveal any new cause for concern related to new graduates in critical care settings. However, the investigator recommends an expansion of who might be included in the new graduate nurse orientation pathway versus the experienced nurse pathway.

The two participants who were not successful were experienced nurses. The two participants who were new graduate nurses were successful. Though no generalizations should be made on these four cases, one might be concerned, and rightfully so. When an “experienced” nurse was found to be struggling, it occurred two to three months in the socialization process. The nurse manager has two options: terminate the new nurse, or extend orientation. The results of this investigation suggest a modification of the second option: using the pre assessment as outlined above to determine if some experienced nurses require an orientation as intense, or nearly as intense as a new graduate nurse. Again, a cost-benefit analysis is warranted; however, examining the cultural value fit of the struggling nurse could be the determining factor. That is, if experienced nurses who meet the above criteria for extended orientation, exemplify and promote the unit’s values, the nurse manager might choose to

invest time and money into these new nurses for the benefit of sustaining or promoting a healthy unit culture.

Stress Reduction

Participants from this study acknowledged stress throughout their socialization process; no doubt, this stress will continue as the socialization process is consummated, and probably beyond. It is probably unfair to characterize critical care nursing as “more stressful” than other types of nursing. However, participants in this study recognized a different level of responsibility for patients of such high acuity. While participants did not view themselves as “better” than other types of nursing, they certainly were consumed by thoughts of the hourly life and death situations for which they would be accountable.

Assisting new critical care nurses to identify and manage their stress early on in their socialization process could enhance new nurses' experiences and decrease burnout so voluminously described in nursing literature. Orientation program coordinators are urged to incorporate the stress management techniques by Lyon (1995, 1991) in their orientation curricula.

Having participants keep a journal may be one technique to foster the processing of stress-related incidents. Participants from this study acknowledged the benefits of keeping a journal and debriefing with an “outside” person (the investigator). Some orientation manuals dedicated space to journal space, but the space was not used, nor encouraged to be used. Perhaps participants were not sure of what to do with such information after it had been written. A formal process of keeping a journal along with a follow up mechanism

appeared to be a constructive tool for self-reflection. Figure 14 depicts the phases of the socialization process and recommendations for critical care educators relevant to each phase.

Figure 14
 Phases of the Socialization Process and Educator Recommendations

The Prodrome → Welcome to the Unit → Disengagement/Testing → On My Own → Reconciliation

Category	<u>"Why I Am Here: The Challenge"</u> <u>"Up for the Challenge"</u>	<u>"Being Nurtured"</u>	<u>"Cutting It"</u> <u>"Why Am I Here?"</u> <u>"Taking Charge"</u>	<u>"Putting It Together"</u>	<u>"Reconciliation"</u>
Orientation Activity	Hospital orientation Basic critical care	Basic critical care Begin care with preceptor	With preceptor Occasional special skills course	Preceptoring ends Formal orientation Occasional special skills course	Occasional special skills course
Recommendations	Explore reasons for choosing critical care Determine individualized learning strategies Comprehensive knowledge and skills assessment Identify peer group for support	"Just in Time" courses/use actual patient care experiences for learning Lay out typical trajectory and expectations of each phase Introduce stress reduction techniques/journals	Weekly meetings with new nurse and preceptor Peer group support Refresh with expectations for this phase Reinforce stress reduction techniques Identify other potential mentors	Reassessment for identification of intermediate and long term learning goals Assignment of mentor/resource person to assist with goal planning and achievement	Monthly review of goals with mentor for assessment and achievement and revision

CHAPTER 9: CONCLUSION

One of the reasons I was drawn to study critical care nurse socialization was because critical care nurses are often viewed as the “ultimate” in nurses. Through my own experiences as medical-surgical nurse, and later as a critical care nurse, I was enthralled with discovering what was so special about critical care nursing and achieving status as a critical care nurse. There seemed to be a sorority or “sisterhood” achieved in actualizing the critical care nurse role. Even as I make my way through the hospital where I teach students, a hospital where I have not had employment as a critical care nurse, I am recognized as a critical care nurse. Somehow, I acquired the necessary skills, experience, and war stories to warrant the status of critical care nurse. I still feel “at home” in a critical care setting—those are the nurses with whom I spend most of my time. I still feel that rush of adrenalin surging through my body when I am called to an emergency situation—my pupils dilate, my pulse quickens, and my thinking skills intensify. The rush is my call to a challenge, my opportunity to make a difference at a critical point in this patient’s life, but sometimes, results in the biggest of disappointments when the outcome is not the desired one. Though some nurses may only enter critical care nursing for the rush (these are the nurses we call “adrenalin junkies”), the goal of critical care nurses is to prevent such situations.

In a time of cost cutting, business oriented health care facilities, I believe critical care nurses are better able to provide holistic care, due to lower nurse patient ratios. This holistic care environment, which includes the family, often

perpetuates the desire to remain in critical care nursing. Nurses who have been “floor nurses” cannot imagine going back to that type of environment, not because they feel floor nurses are inferior, but because they enjoy knowing “everything” about the one or two patients for whom they are caring. Floor nurses often feel they did nothing but run all day, failing to make significant contact with their patients, and pray they have not forgotten something major. Frankly, it is a sad commentary on the status of floor nursing in today’s health care environment. To many, critical care nursing is an ideal nursing situation, at least in the hospital environment.

This study uncovered the excitement and challenges of entering a critical care setting. It also unmasked the fears and anxieties new nurses experience during this time. It is hoped that through exposing the early phases of critical care nurse socialization, we can learn how to care for our new caregivers. Because of this study, nursing has a clearer picture of what that process entails for an individual, and how we can move from the perception that we “eat our young,” to the perception that we facilitate movement from novice to stellar nurses. After all, is not creating stellar, expert nurses the key to excellence in patient care?

References

- Alspach, J. G. (1990). Critical care orientation: A discussion of survey results. Critical Care Nurse, 10(6), 10, 12-14, 16.
- American Nurses Association (1985). Code for nurses with interpretive statements. Kansas City: American Nurses Association.
- Anderson, S. L. (1991). Preceptor teaching strategies: Behaviors that facilitate role transition in senior nursing students. Journal of Nursing Staff Development, 7(4), 171-175
- Asselin, M. E. & Barber, E. D. (1991). Unit orientation for experienced nurses: Process and evaluation. Journal of Nursing Staff Development, 7(3), 126-129.
- Bellinger, S. R. & McCloskey, J. C. (1992). Are preceptors for orientation of new nurses effective? Journal of Professional Nursing, 8(6), 321-327.
- Benner, P. (1984). From novice to expert. Menlo Park, CA: Addison-Wesley.
- Bethel, P. L. (1992). RN orientation: Cost and achievement analysis. Nursing Economics, 10(5), 336-341, 359
- Blumer, H. (1969). Symbolic interactionism: Perspective and method. Englewood Cliffs, NJ: Prentice-Hall.
- Boyle, D. K., Popkell-Vawter, Sue, & Taunton, R. L. (1996). Socialization of new graduate nurses in critical care. Heart & Lung, 25(2), 141-154.
- Bradby, M. (1990b). Status passage into nursing: Undertaking nursing care. Journal of Advanced Nursing, 15(12), 1363-1369.

Bradby, M. (1990a). Status passage into nursing: Another view of the process of socialization into nursing. Journal of Advanced Nursing, 15(10), 1220-1225.

Byrd, C. Y., Hood, L., & Youtsey, N. (1997). Student and preceptor perceptions of factors in a successful learning partnership. Journal of Professional Nursing, 13(6), 344-351.

Cardonna, S. M. & Bernreuter, M. (1996). Graduate nurse overhires: A cost analysis. Journal of Nursing Administration, 26(3), 10-15.

Carroll, P. (1992). Using personality styles to enhance preceptor programs. Dimensions of Critical Care Nursing, 11(2), 114-119.

Chenitz, W. C. & Swanson, J. (1986). From practice to grounded theory. Menlo Park: CA: Addison-Wesley.

Christman, L. (1991). Perspective on role socialization of nurses. Nursing Outlook, 39(5), 209-212.

Clayton, G. M., Broome, M. E., & Ellis, L. A. (1989). Relationship between a preceptorship experience and role socialization of graduate nurses. Journal of Nursing Education, 28(2), 72-75.

Conway, M. E. (1983). Socialization and roles in nursing. Annual Review of Nursing Research, 1, 183-208.

Coudret, N. A., Fuchs, P. L., Roberts, C. S., Suhrheinrich, J. A., & White, A. H. (1994). Role socialization of graduating student nurses: Impact of a nursing practicum or professional role conception. Journal of Professional Nursing, 10(6), 342-349.

Cunningham, J. L. (1988). Critical care orientation: A comparison of two teaching methods. Heart and Lung, 17(5), 469-475.

Decker, F. H. (1985). Socialization and interpersonal environment in nurses' affective reactions to work. Social Science and Medicine, 20(5), 449-509.

Dufault, M. A. (1990). Personal and work-milieu resources as variables associated with role mastery in the novice nurse. Journal of Continuing Education, 21(2), 73-78.

Dunn, S. V. (1992). Orientation: The transition from novice to competent critical care nurse. Critical Care Nursing Quarterly, 15(1), 69-77.

Feldman, C. (1976). A contingency theory of socialization. Administrative Science Quarterly, 21, 433-452.

Flewellyn, B. J. & Goshell, D. J. (1987). Comparing two methods of hospital orientation for cost effectiveness. Journal of Nursing Staff Development, 3(1), 3-8.

Glaser B. (1992). The basics of grounded theory analysis. Mill Valley, CA: Sociology Press.

Glaser B. & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. New York: Aldine.

Goldenberg, D. & Iwasiw, C. (1993). Professional socialisation of nursing students as an outcome of a senior clinical preceptorship experience. Nurse Education Today, 13(1), 3-15.

Green, G. J. (1988). Relationships between role models and role perceptions of new graduate nurses. Nursing Research, 37(4), 245-248.

Gunderson, L. P. & Kenner, C. A. (1988). Socialization of newborn intensive care unit nurses through the use of mentorships. Neonatal Network, 7(2), 7-13.

Harbison, J. (1991). Clinical decision making in nursing. Journal of Advanced Nursing, 16(4), 404-407.

Harman, L., Wabin, D., MacInnis, L., Baird, D., Mattiuzzi., & Savage, P. (1989). Developing clinical decision-making skills in staff nurses: An educational program. The Journal of Continuing Education in Nursing, 20(3), 102-106.

Hudgins, C. L. (1991c). Critical care competency-based orientation: Part 3. Critical Care Nurse, 11(10), 11-25.

Hudgins, C. L. (1991b). Critical care competency-based orientation: Part 2. Critical Care Nurse, 11(9), 58-70.

Hudgins, C. L. (1991a). Critical care competency-based orientation: Part 1. Critical Care Nurse, 11(8), 78-88.

Jenkins, H. M. (1985). Improving clinical decision making in nursing. Journal of Nursing Education, 24(6), 242-243.

Jenks, J. M. (1993). The pattern of personal knowing in nursing clinical decision making. Journal of Nursing Education, 32(9), 399-405.

Johnson, K. (1998). Learning the ropes through mentoring. The Canadian Nurse, 94(2), 27-30.

Kapborg, I. D. & Fischbein, S. (1998). Nurse education and professional work: Transition problems? Nurse Education Today, 18(2), 165-171

Keddy, B., Sims, S. L., & Stern, P. N. (1996). Grounded theory as feminist research methodology. Journal of Advanced Nursing, 23(3), 448-453.

Kidd, P. & Sturt, P. (1995). Developing and evaluating an emergency nursing orientation pathway. Journal of Emergency Nursing, 21(6), 521-530.

Kinley, H. (1995). Defining role models for staff orientation. Nursing Standard, 15(10), 27-29.

Laing, M. (1993). Gossip: Does it play a role in the socialization of nurses? Image: Journal of Nursing Scholarship, 25(1), 37-43.

Lincoln, Y. S. & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

Lyon, B. L. (1995). Conquering stress in changing times: A stress management guide for nurses. Research Triangle Park, NC: Glaxo Inc.

Lyon, B. L. (1991). Stress: Coping and conquering. Research Triangle Park, NC: Glaxo Inc.

Mark, B. A. & Hagenmueller, A. C. (1994). Technological and environmental characteristics of intensive care units: Implications for job redesign. Journal of Nursing Administration, 24(4S), 65-70.

Messmer, P. R., Abelleira, A., & Erb, P. S. (1995). Code 50: An orientation matrix to track orientation cost. Journal of Nursing Staff Development, 11(5), 261-264.

Mitchell, G. J. & Cody, W. K. (1993). The role of theory in qualitative research. Nursing Science Quarterly, 6(4), 170-178.

Modic, M. B. & Bowman, C. (1989). Developing a preceptor program: What are the ingredients. Journal of Nursing Staff Development, 5(2), 78-83.

Mooney, V. A., Diver, B., & Schnackel, A. A. (1988). Developing a cost-effective clinical preceptorship program. Journal of Nursing Administration, 18(1), 31-36.

Morse, J. M. (1994). Designing funded qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.). Handbook of qualitative research (pp. 220-235). Thousand Oaks, CA: Sage.

Nayak, S. (1991). Strategies to support the new nurse in practice. Journal of Nursing Staff Development, 7(2), 64-66.

Oermann, M. H. & Provenzano, L. M. (1992). Students' knowledge and perceptions of critical care nursing. Critical Care Nurse, 12(1), 72-77.

O'Friel, J. A. B. (1993). The nurse internship experience: A dynamic learning environment for the novice. Journal of Nursing Staff Development, 9(1), 24-27.

Ouellet, L. L. (1993). Relationship of a preceptorship experience to the views about nursing as a profession of baccalaureate nursing students. Nurse Education Today, 13(1), 16-23.

Pesut, D. J. (1998). Utilizing the Outcome-Present State-Test (OPT) Model of clinical reasoning. Workshop at Indiana University School of Nursing and the Institute for the Study of Developmental Disabilities, Bloomington, Indiana. August 4.

Pesut D. J. & Herman J. (1998) OPT: transformation of nursing process for contemporary practice . . . Outcome-Present State-Test. Nursing Outlook 46(1), 29-36.

Peterson, K. J. (1991). Competency-based orientation program for a cardiovascular surgery unit: Part 1. Critical Care Nurse, 11(2), 32-48.

Porte-Gendron, R., Simpson, T., Carlson, K. K., & Vande Kamp, M. (1997). Baccalaureate nurse educators' and critical care nurse managers' perceptions of clinical competencies necessary for new graduate baccalaureate critical care nurses. American Journal of Critical Care, 6(2), 147-158.

Reising, D. L. (1997, October). Retention issues in a cardiovascular recovery unit: Theoretical dimensions. Poster session presented at the Leadership for Performance Conference, Ann Arbor, MI.

Reising, D. L. (1994). Forecasting critical care nursing: Implications for nursing education. Unpublished manuscript.

Ressler, K. A., Kruger, N. R., & Herb, T. A. (1991). Evaluating a critical care internship program. Dimensions of Critical Care Nursing, 10(3), 176-184.

Reutter, L., Field, P. A., Campbell, I. E., & Day, R. (1997). Socialization into nursing: Nursing students as learners. Journal of Nursing Education, 36(4), 149-155.

Sakallaris, B. R. (1991). The ICU fellowship: An innovative orientation program for new graduates in critical care. Focus on Critical Care, 18(2), 153-157,

Sandelowski, M. (1995b). Qualitative analysis: What it is and how to begin. Research in Nursing & Health, 18, 371-375.

Sandelowski, M. (1995a). Sample size in qualitative research. Research in Nursing & Health, 18, 179-183.

Spickerman, S. (1988). Enhancing the socialization process. Nurse Educator, 13(6), 10-14.

Stachura, L. M. & Hoff, J. (1990). Toward achievement of mentoring for nurses. Nursing Administration Quarterly, 15(1), 56-62.

Stern, P. N. (1985). Using grounded theory method in nursing research. In M. M. Leininger (Ed.). Qualitative research methods in nursing (pp. 149-160). New York: Grune & Stratton.

Stern, P. N. (1980). Grounded theory methodology: Its uses and processes. Image, 12(1), 20-23.

Straub, C. W., Mishic, B., & Mion, L. C. (1997). Evaluation of an orientation system for newly employed registered nurses. Journal of Nursing Staff Development, 13(3), 163-169.

Streubert, H. J. & Carpenter, D. R. (1995). Qualitative research in nursing: Advancing the humanistic imperative. Philadelphia: J. B. Lippincott.

Suhy, P., & Burson, R. (1991). The orientation of nurses to the CVICU. Critical Care Nurse, 11(2), 77-81.

Tabak, N., Bar-Tal, Y., & Cohen-Mansfield, J. (1996). Clinical decision making of experienced and novice nurses. Western Journal of Nursing Research, 18(5), 534-547.

Thomas, J. G., Bounds, W. T., & Brown, G. (1991). Helping nurses adjust: Who provides what job information? Journal of Nursing Staff Development, 11(3), 130-133.

Tradewell, G. (1996). Rites of passage: Adaptation of nursing graduates to a hospital setting. Journal of Nursing Staff Development, 12(4), 183-189.

Welch, L. G. & Stull, M. K. (1991). Energizing professional orientation. Journal of Nursing Staff Development, 7(5), 220-224.

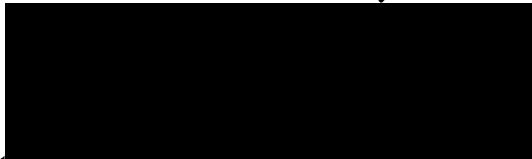
Appendix A



Bloomington Hospital • P.O. Box 1149 • Bloomington, Indiana 47402 • 812-336-6821

**Institutional Support Statement for
The Socialization of Critical Care Nurses Study**

**I am aware of the study "The Socialization of Critical Care Nurses"
by Deanna L. Reising, a doctoral student in Indiana University School of
Nursing. I hereby give my support for the study to be conducted in the adult
critical care units at Bloomington Hospital. The study may begin upon
approval by the Indiana University, Purdue University at Indianapolis
Institutional Review Board.**

A large black rectangular box redacting the signature of the official.

Signature

Vice President
Title

1-20-98
Date

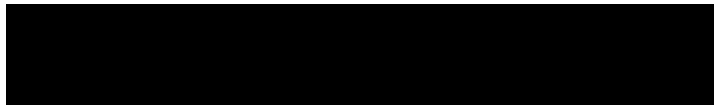


Clarian Health
Methodist · IU · Riley

**Department of Nursing &
Patient Care Services**

November 19, 1997

I am aware of the study "The Socialization of Critical Care Nurses" by Deanna L. Reising, a doctoral student in Indiana University School of Nursing. I hereby give my support for the study to be conducted in the adult critical care units at University Hospital. The study may begin upon approval by the Indiana University, Purdue University at Indianapolis Institutional Review Board and approval by the Patient Care Research Committee.



**Sonna Ehrlich, M.S.N., R.N.
Senior Vice President for Nursing and
Patient Care Services and Chief
Nurse Executive**

Clarian Health Partners, Inc.

**Indiana University Hospital
550 North University Blvd., Room 1602
Indianapolis, Indiana**

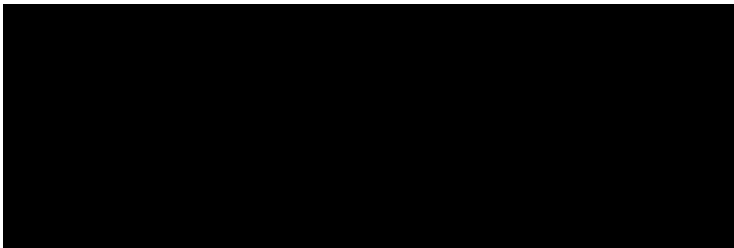
**317 274-3717 office
317 278-0091 fax**



COLUMBUS REGIONAL HOSPITAL

**Institutional Support Statement for
The Socialization of Critical Care Nurses Study**

I am aware of the study "The Socialization of Critical Care Nurses" by Deanna L. Reising, a doctoral student in Indiana University School of Nursing. I hereby give my support for the study to be conducted in the adult critical care units at Columbus Regional Hospital. The study may begin upon approval by the Indiana University, Purdue University at Indianapolis Institutional Review Board.



Sr. Admission Clinical Services 12/5/97
Title Date

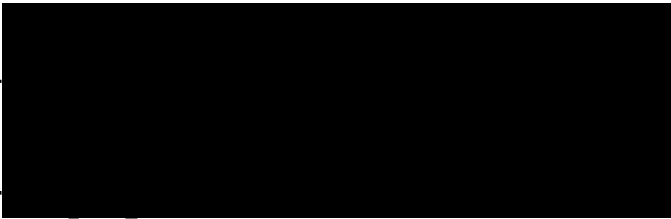
2400 EAST 17TH STREET
COLUMBUS, INDIANA 47201



Ann L. Hendrich, MSN, RN
Senior Vice President
Patient Care Services
Methodist Hospital

**Institutional Support Statement for
The Socialization of Critical Care Nurses Study**

I am aware of the study "The Socialization of Critical Care Nurses" by Deanna L. Reising, a doctoral student in Indiana University School of Nursing. I hereby give my support for the study to be conducted in the Adult Critical Care units at Methodist Hospital. The study may begin upon approval by the Indiana University, Purdue University at Indianapolis Institutional Review Board.



Signature

SVP
Title

11/22/28
Date

Clarian Health Partners, Inc.

1-65 At 21st Street
P.O. Box 1167
Indianapolis, Indiana
46206-1367

(17 929-2000)
317-929-3083 office
317-929-2936 fax

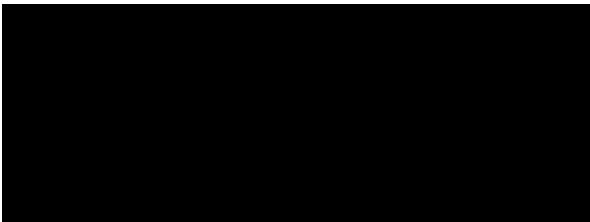
WISHARD
HEALTH
SERVICES

1001 West Tenth Street PH 317-639-6671
Indianapolis, IN 46202

January 28, 1998

**Institutional Support Statement for
The Socialization of Critical Care Nurses Study**

I am aware of the study "The Socialization of Critical Care Nurses" by Deanna L. Reising, a doctoral student in Indiana University School of Nursing. I hereby give my support for the study to be conducted in the adult critical care units at Wishard Hospital. The study may begin upon approval by the Indiana University, Purdue University at Indianapolis Institutional Review Board.



Director CC CNA

1-28-98

Title

Date

The heart and science of health and healing.

Appendix B

INTERDEPARTMENTAL COMMUNICATION
 Research and Sponsored Programs
 Indiana University - Purdue University Indianapolis

FEB 11 1998

DATE: February 9, 1998

TO: Sharon L. Sims Ph.D.
 Family Health
 NU 318
 IUPUI

Post-It Fax Note 7674		Date 3/3/98	# of pages 1
To	Deanna Reising		
Co./Dept.			Co.
Phone #			Phone #
Fax #	5-19810		Fax #

FROM: Leigh Mott
 Research Risk Specialist
 UN 618

SUBJECT: Final Approval

Study Number: 9712-04-B The Socialization of Critical Care Nurses
 Sponsor(s): n/a

The study listed above has received final approval from the IRC Behavioral/Social Sciences. As the principal investigator of this study, you assume the following reporting responsibilities:

- CONTINUING REVIEW** - A status report must be filed with the Committee. The Research Risk staff will generate these reports for your completion; however, you must request and complete these forms if the study is terminated for any reason in the interim. This study is approved from February 9, 1998, to February 9, 1999.
- STUDY AMENDMENTS** - Investigators are required to report on these forms ANY changes to the research study including protocol design, dosages, timing or type of test performed, population of the study, and informed consent statement. An amendment form is attached for your future use in submitting study amendments for committee review.
- ADVERSE EVENTS** - If this is a medical study, all side effects or adverse reactions which are serious and unexpected must be reported immediately to the Committee as they occur (see attached requirements).
- UPDATED INVESTIGATIONAL BROCHURES, PROGRESS REPORTS and FINAL REPORTS** - If this is an investigational drug or device study, updated clinical investigational brochures must be submitted as they occur (see attached requirements). Three copies of progress or final reports must be provided to the Committee with the investigator's written assessment of the report, briefly summarizing any changes and their significance to the study.
- ADVERTISEMENTS** - If you will be advertising to recruit study participants for a drug or device study regulated under FDA requirements, i.e., investigational drugs or devices will be used, and the advertisement was not submitted to the committee at the time your study was reviewed, a copy of the information contained in the advertisement and the mode of its communication must be submitted to the reviewing committee as an amendment to the study. These advertisements must be reviewed and approved by the committee PRIOR to their use.
- LEAVING THE UNIVERSITY** - If the principal investigator leaves the Institution, the committee must be notified as to the disposition of EACH study.

PLEASE REFER TO THE ASSIGNED STUDY NUMBER AND THE EXACT TITLE IN ANY FUTURE CORRESPONDENCE WITH OUR OFFICE. All documentation related to this study must be neatly typed and must also be maintained in your files for audit purposes for at least three years after termination of the research. If you have any questions, please call Research and Sponsored Programs at [redacted]

- | | | |
|-------------|--------------------------------------|--|
| Enclosures: | Documentation of Review and Approval | Report of Updated Clinical Investigational Brochures |
| | Expedited Review Checklist | Report of Adverse Reactions |
| | Amendment Form | Copy of Assurance Letter |
| | Informed Consent Statement | |

DIHS Multiple Project Assurance #MI 167, IRB No. 01

Appendix C

IUPUI Informed Consent Statement
for

Project Title: "The Socialization of Critical Care Nurses"

You are being asked to participate in a study to investigate the socialization of critical care nurses. This study is being conducted to identify the process of how nurses become critical care nurses. The results of this study will allow the investigator to understand the process of critical care nurse socialization with the goal of improving the process.

You will be asked to participate in 4-5 audio taped interviews over approximately a 4 month period. These interviews will last approximately 1 hour. In addition, you will be asked to keep a diary at the half way point between each interview session. Data from both the interviews, diaries, and orientation materials from your facility will be used to uncover the process of critical care nurse socialization. People facilitating your experience may also be asked to an interview related to your socialization process.

As a participant in the study, you may or may not benefit from the study. However, if you participate, you may provide useful information that could enhance the process for future critical care nurses. There is no compensation for participating in this study and there is no cost to participate in this study.

The possibility of risk in participating is primarily the asking and receiving of sensitive information related to your employment. To minimize this risk: 1) Data will be grouped to protect individuals from being identified; 2) you will be assigned a code name; and 3) your identity will not be revealed in published reports. In addition, data will be stored in a locked cabinet in the investigator's office. Though your data will not be anonymous to the investigator, it will be held in the strictest confidence. At the conclusion of the study, you will be given the option of either receiving your audiotapes and original diaries for you to keep, or have the investigator destroy the audiotapes and original diaries.

Your participation is voluntary and you may withdraw without penalty at any point in the study. If you have any questions, you should contact the investigator, Deanna Reising, at work [redacted] or home [redacted]. You may also contact the investigator's primary mentor, Sherry Sims at [redacted]. You should feel free to call collect.

I give my consent to participate in the study.

Participant

Date

Witness
1/21/98

Date

Appendix D

IUPUI Informed Consent Statement
for

Project Title: "The Socialization of Critical Care Nurses"

You are being asked to participate in a study to investigate the socialization of critical care nurses. This study is being conducted to identify the process of how nurses become critical care nurses. The results of this study will allow the investigator to understand the process of critical care nurse socialization with the goal of improving the process.

You are being asked to participate in 1 or more audio taped interviews. The interviews will last approximately 1 hour. Data from your interviews will be used, along with data from the new nurse, to uncover the process of critical care nurse socialization.

As a participant in the study, you may or may not benefit from the study. However, if you participate, you may provide useful information that could enhance the process for future critical care nurses. There is no compensation for participating in this study and there is no cost to participate in this study.

The possibility of risk in participating is primarily the asking and receiving of sensitive information related to your employment. To minimize this risk: 1) Data will be grouped to protect individuals from being identified; 2) you will be assigned a code name; and 3) your identity will not be revealed in published reports. In addition, data will be stored in a locked cabinet in the investigator's office. Though your data will not be anonymous to the investigator, it will be held in the strictest confidence. At the conclusion of the study, you will be given the option of either receiving your audiotapes for you to keep, or have the investigator destroy the audiotapes.

Your participation is voluntary and you may withdraw without penalty at any point in the study. If you have any questions, you should contact the investigator, Deanna Reising, at work [REDACTED] or home [REDACTED]. You may also contact the investigator's primary mentor, Sherry Sims at [REDACTED]. You should feel free to call collect.

I give my consent to participate in the study.

Participant

Date

Witness
1/21/98

Date

Appendix E

COMPLETE QUOTATION SOURCES PER CATEGORY**“Why I Am Here: The Challenge”**

“I see the nurses and doctors and how well they know their stuff and I wanted to be able to learn from them.”

“. . . you get a lot of really good experience and kind of pave the way. If you can do a year here, then you can do a year anywhere . . . So, I wanted to get that kind of experience.”

“Probably the first thing was, I always remember my first semester of clinicals . . . I just found that the nurses, I was amazed at how much they knew, how much information and how much stuff they could share about what was going on.”

“. . . and I just felt like I really liked the high tech . . . and talking to the nurses, I’m amazed at how much information they know.”

“I wanted to work critical care for the excitement, challenge, and prestige. According to society, critical care nurses are the best nurses and I want to be the best.”

“Cause I had had some previous experiences with other types of nursing and I really don’t want to spend my time passing medications and doing Accuchecks all day.”

“I need to come to a critical care area where I can get a foundation of all my vents and all my other stuff.”

“But I decided that I was getting burnt out on those types of patients and I’m used to a fairly high intensity so I didn’t want something that was kind of day in and day out. I wanted something that was more exciting and something new all the time and so I just decided that critical care was something that I would be interested in.”

“. . . I’m just the type of person who when I get into something, I want to know everything about it. I want to be good at what I’m doing and there’s so much more out there in nursing I don’t know about. I want to be well prepared for anything that happens. So not only do we have a limited amount of acute care patients we’re going to get at that facility, but in terms of moving up . . . there’s not that far that I can go up in that kind of atmosphere.”

“I was getting bored and I wanted to gain some experience that I hadn’t had . . . I’m curious and I want the challenge . . . I guess it’s maybe, it’s a personal goal for myself.”

Critical Care Nurse Hierarchy

"Yeah, critical care. They portray that they are better."

"I get the feeling that the CV nurses think they are better than the critical care nurses . . . I have been told that . . . I have heard them say well it's obvious this is so and so."

"(critical care nurses) are the cream of the crop."

"CCU (critical care unit nurses) are stubborn, uncooperative, and arrogant. They think step down unit nurses are stupid."

"Why I Am Here: The Challenge"/Unsuccessful Participants

"I think the main thing that brought me to the critical care unit was the fact that my father had died of a heart attack and because of that it struck an interest as far as how I might be able to prevent someone else having the same type of thing . . . The floor I was working on I took the position to get my foot in the door. So it was definitely time for a career change."

". . . and my director has confidence in me because of how quickly I caught on at the unit I work on now."

". . . I have a friend here who works nights . . . and I like the 12 hour shifts . . . and I just knew a lot of the people over here and that they were really nice and all."

"Up for the Challenge"

"I'm scared to death. But I think I'll be a really good nurse when I'm finished."

"I feel I have been given a tremendous challenge, and I'm going to meet it."

". . . and then just being here, I'm just like a sponge. I like to absorb all the knowledge. I like knowing all these things and I just felt like this was a place where I could grow more and learn a lot more . . ."

"I know I'll just have to ask a lot of questions"

"Vents don't intimidate me. I stay focused . . . 75% of this is your own attitude."

"I know I'm coming here to provide competent patient care and hopefully, people will have enough patience with me to answer my questions."

"So I am just really eager to learn and understand stuff and I have this stack of books when I go home."

"I'm scared to death . . . I expect to be a good nurse when I'm done with this."

"I like it. I'm real excited. At first I was nervous, kind of, mainly, I think I was nervous because I was afraid I'd come in, you know, maybe they'd be OK here's your one person and I wouldn't know anything . . . I'm really motivated . . ."

"I'm still planning on asking a lot of questions . . ."

"Welcome to the Unit"

". . . everybody has made me feel really welcome."

"The first couple of weeks are tours of information, you know, and they give you everything and tell you everything."

". . . and they introduce me . . . have you met so and so?"

"Being Nurtured"

"She (my preceptor) shares some of her similar experiences with me when appropriate."

"She (my preceptor) keeps telling me that I'm showing some of the same qualities she has as far as I'm very thorough with my charting . . . She always reassures me that I'm moving in the right direction."

"But that was something I didn't know . . . I didn't even have to ask her."

". . . I was amazed . . . that the first day we had that patient go bad and it was like 4 nurses in the room. They each knew what they had to do and you're not alone. So that's the thing and especially when they know I'm new. Like I've had a lot of people (offer) because they know I need IV starts . . ."

". . . she's always, like today, you had a good day and I'm like blow it out your ear. She was just trying. I had a bad day and you're just trying to (make me feel better)."

"The first day that I worked with her, she was, you know, real good and showed me everything and was good with making sure I got to do things that I didn't do. She didn't leave me stranded or, you know, push things off on me."

"Being Nurtured"/Unmet Expectations

". . . and I really didn't think she should be leaving me alone that much . . . I mean, I feel like I'm on my own too early."

"From what I've spoken with the other a nurses, a (new nurse) came over from _____. Their preceptors the first 2 and 3 weeks were right there. You know, during the assessment, the vital signs. Every detail, they were there and they were gradually leaving them alone."

"Disengagement/Testing"

"She tries to push me out there . . ."

". . . I'm starting to go on my own a little bit without my preceptor. She's just there if I need to ask questions . . ."

"Sometimes I am left alone, kind of to do it on my own. Which is good in some ways and bad in others."

"Like sometimes she's off, you know, go talk to whoever, whatever, you know. But if I'm taking care of patients all day, what's there left to do?"

"Kind of like orientation by fire."

"I am overwhelmed at times because my preceptor and I seek out the most challenging patients on the team. Even though it can be tiring, I know that it serves a purpose. If I care for the most challenging patients during orientation, I will be better prepared when I am off orientation . . . Each day my preceptor gives me more independence. She does not help me or remind me to do things to test my independence."

"Finally, they (said) . . . get up here, you need to be doing this, you know, they were putting a Camino in . . ."

". . . my preceptors (said) I'm going to stand back and today's your day and I'm not going to tell you to do anything."

". . . they're kind of at the point where they're like you're on you're own, and I'm just your shadow so you let me know when you need something . . ."

". . . she (preceptor) and I had our patients and basically I did everything and she helped and was helping other people. I had to go to her if I needed something, but I did all this stuff myself."

"It wasn't like she really left me out alone. She just wanted me to feel like I as more independent because she felt like I was ready for that."

"It had been that way (new nurse takes lead in care and preceptor checks work) . . . There were a couple of nights when I couldn't keep up and . . . she ended up taking that (admission)."

"Well, I'm going to remain with a preceptor and I expect more and more responsibility will be going over to me to take care of the patient load and they'll be there to coach and guide."

"Cutting It"/The Struggle

"Working on the critical care unit has been extremely difficulty. I can't seem to catch on to what is going on."

"I keep telling myself that I'll eventually catch on, but some things are just not being retained in my head no matter what I do."

"I can tell my preceptor is aggravated by me quite a bit now . . . I feel a lot like a brand-new nurse out of school. It's frustrating."

"I was a little concerned that I wasn't catching on the way I usually do especially since it's a hand on thing, I usually pick up on things pretty quickly. But with this critical care stuff, I'm not picking it up as quickly and that bothers me . . . They've told me that, but . . . I've still got these expectations and it makes me feel uncomfortable . . ."

". . . I know the . . . general functioning anatomy and physiology . . . and when you go and try to apply it to . . . the way the put a Swan Ganz in and all that kind of thing . . . kind of alters the whole picture."

"Basically, what they told me I needed to work on were medications, breath sounds, and heart sounds."

"Cutting It"

"It's my job as preceptor to make sure they're (new nurses) getting what they need and doing what they're supposed to do. They will soon be off orientation and need to know what it's like before they don't have me around . . . They have to be able to organize and figure out what they're going to do with the patients. They also have to be able to prioritize."

"I'm hoping for light bulbs to go off . . . that they are able to apply concepts to new situations."

"I'm looking for problem-solving skills and for them to move away from such a task-orientation."

"Oh, I'm definitely testing them. I have to know whether they are performing at a high enough level to come off orientation. I can't let them go on if they're not safe."

"At the end of a week, they should be doing the basics."

"I want them to be able to do the basics . . . like knowing meds to a point, and assessments . . . what you should have learned in school."

"I want them to show intelligence, be able to make quick decisions, be organized, and stand on their own two feet."

"My red flags are if they are too confident, don't look up meds, are providing unsafe care, missing important data, or lack motivation."

"Why Am I Here?"

"I keep going over and over in my head. Do I really want this? Is it worth all the stress?"

"I can't believe how uncomfortable I still feel . . . Again I ask myself. Do I really want this?"

". . . I'm just having a lot of stress because of it and me just had to wonder if I'm really if this is really what I thought I wanted."

"(My preceptor) keeps assuring me that the feelings and frustrations I'm experiencing are part of the process."

". . . cause I forgot to check somebody's blood sugar and I got really upset . . . and they're really good about encouraging me to keep going . . . because for a while there I said well, I'm not going to do critical care anymore. I'm not even going to stay in the hospital."

". . . and I keep thinking to myself if everybody felt this way when they started as a new nurse in critical care, how come I don't hear about all of these nurses that have left critical care? Because I wanted to so many times just because I'm not comfortable. I haven't heard of anybody who said I can't do this I'm leaving. They are all still here. They all stuck it out."

". . . and it was a little bit scary for me last week. I know I had some second thoughts. I was really thinking am I going to be able to do this and you know, I hate making mistakes."

". . . it was just like what did I get myself into . . . a patient went bad and we're going to CAT scan stat, God the patient had hemorrhaged, they were intubating . . . all this stuff was happening and I was just in the corner."

"Some days in class I was really fearful that I was never going to get it, that I would not be able to do this."

"After the first night, I had no self confidence. I felt like going back (to former employer) . . . but I'd just feel like I'd be giving up if I went back."

"Taking Charge"

"So, I thought it's really important to get motivated to do this. So, I was just like hell bent on doing all of this on my own and going a hundred miles an hour even if anybody would ask me if I need any help and even if I was really busy I would say no."

"I will absolutely die before I ever let them tell me that I can't do it."

". . . and I came back out with a stack this big . . . I didn't even know that all this stuff was in there . . . and to give it to the patients . . . and can be real helpful when you have post op patients and you have to do their teaching. So I've got all of those at home and I've been reading through those."

"I have an orientation handbook and (my preceptor) is supposed to be initialing everything I did. But I've been going home and highlighting everything that I've done, but she hasn't checked off."

"I lit a fire, and they better not try to stomp it out."

"When I went into work that night, it wasn't much better. But I forced determination that I was going to take 2 patients alone, and I did."

"No one every seemed to think that maybe I'd need to know those (protocols). But the only way I've learned some of those is by grabbing the policy and procedure book over there."

"I feel I have to do it (take control of my progress), because my preceptors have been so erratic."

"I already have a list of my own on things I need to look into . . ."

"On My Own"/Extending Orientation

"Maybe I would have liked another week or two on nights . . . I don't think they could have said no to me. But I think they would have thought well what is your problem. Aren't you oriented enough?"

"And my preceptor agreed. She thought it was ridiculous to assume that 6 weeks on the unit was enough . . . They kept reassuring me that if you have questions there are plenty of people to ask. Well, sure, but if they're busy, what if I've got someone complaining of chest pain? Well, I need them in the room ASAP. You know, are they going to be free? . . . I think they probably wouldn't like it, but yeah, they'll give it to me."

"On My Own"/Discomfort with Technology

"When I watch the nurses who are running it (the new nurse's code), they are so calm . . . and I don't know my algorithms and . . . what rhythms and it's all just a mess. And I don't feel confident yet."

"Well, last night my patient was supposed to go down for an MRI . . . and I couldn't take them."

"During report I found each patient to be critical and each unstable with either ICP (intracranial pressure) or BP (blood pressure) problems or major traumas. When it came time to pick patients, I felt like I was going to cry because I didn't want any of the patients. Almost every patient on the team had to travel (go for a test off the unit) that day. I did not want to travel by myself."

"(during a code) . . . I mean I didn't know how to start IV's . . . they're like do you want to put this NG down I'm like oh no, which I could have done, but at the moment I was like no way."

"I've never really done an emergency situation where I've had to make decisions . . ."

"I don't know if I've just been lucky, but when I end up getting a tough patient, there are always people helping."

"I've been interpreting them (rhythm strips) and stuff and they check them and make sure."

"I had to get advice and help to titrate the nitro (intravenous nitroglycerin drip) . . ."

"I feel like I can handle my patients . . . but I don't think I can do it all by myself right now."

"Putting It Together"/Stunted Optimism

"I can't believe how uncomfortable I still feel. It's been about a month since I've started actually working on this unit. I feel my whole body tense up as soon as I come on the unit in the morning."

". . . I think I've got certain expectations of myself as well as I know my preceptor has certain expectations for me . . . when I get her upset then I know I have failed what she expected of me which only makes it worse on me because you know I've already got a higher expectation than what she has."

"I think I should be a little bit more organized with my time by now."

"I think it's going to take me awhile. I really though that I'd feel more comfortable at this point and I think it's going to take a little while longer than I expected. I'm a little disappointed in myself because . . . I thought I was doing so well at the end of orientation. That's because I have that crutch there . . . so, I am a little disappointed, but I know I'll get through it."

"All I keep hearing is it will get better with time."

"I'm probably farther along (than the other orientees), and I'll admit that I'm probably not as far as I should be."

"I'm doing okay, but the rest of them (other orientees) have had more experience than I have and so they're farther along. But I don't stand back, I jump in."

"I don't feel like I'm where I want to be and I don't know if maybe I want to go faster than what people usually do or exactly what."

"Putting It Together"

"I have time to read the patient's charts and get a thorough history."

"I set up my own organizing system and now I have a little more time."

"I am organized and I almost always leave on time."

"My confidence is improving as my organizational skills improve."

"I'm doing better at organizing my time . . . I'm feeling more comfortable."

"Part of it is I try to work on organizing my info . . . and report on only the most pertinent information."

"I'm more organized now and that makes me more comfortable. I have more time to look at charts."

"I'm comfortable in my nursing skills . . . I have more experience than many of the experienced critical care nurses . . ."

"I feel more confident in my assessments, even when someone else has a different assessment than mine."

"I had a really bad day, but I made it through! That really helped my confidence."

"Last week I was given a difficult patient each night . . . After last week, I realized that I am getting some of my confidence back."

"I feel my assessment skills are better and am confident when asked about my findings."

"I detected a change in a rhythm and I felt really good about that. I was also able to problem solve the situation."

"I feel comfortable with my assessment skills and my ability to make decisions."

"I did all the (list of extraneous unit care tasks) and had my 2 patients. It was a confidence builder."

"Somehow I managed to get everything done tonight, and all my patients were OK when I left, so I felt I did a good job."

“ . . . I think I’m pretty good with assessing the patient . . . I’ve gone at least two occasions where interns have no assessment, neither pupil reaction or one side is weakness which have not been charted on a previous shift and I’ve found it.”

“I know my basic assessments . . . and finally I said I used to be a nurse with no monitors, so I think it’s pretty good.”

"Reconciliation"

"And in a discussion I had with the group that I met with, they said you know I should always feel a bit uncomfortable because if you don't then there's something wrong. So, I mean, I guess, I'm feeling normal maybe a little bit more than I should because it's such a new situation, but it's still an uneasy feeling."

"I heard it takes about a year to be comfortable and I'd be asking questions for about a year . . ."

"She (my preceptor) told me it would take me about a year to . . . start feeling comfortable. Which sounds like a really long time, but she said it goes pretty fast. So she says that what I'm feeling is normal or at least that's how she felt."

"I still have a long way to go, but I think I have (made it). Personally overcoming the fear that I wouldn't be able to stay was important."

". . . she (my preceptor) is the reason why I take care of my patients the way that I do because she was my only role model."

"I know I will continue to learn and make mistakes."

"I know that I still have a lot to learn and I learn something new everyday. I know that nursing is a continuous learning process and I need to push myself to continue to study and learn."

". . . I still have a lot to learn, but everybody does, so I don't doubt my ability . . . I've passed the rough part."

". . . and I realize a lot of it is just going to be experience."

"I'm not going to be able to know everything until I have it."

"I know I have a lot to learn, but I'm not sure what all there is to learn yet."

"I've asked several nurses how long it took them to feel comfortable and they said numbers like 6 months, a year."

". . . I've asked people and the general consensus that I've got from asking people is that it takes about a year to really even start to feel comfortable."

"I compare myself to those who have more experience and then I compare myself to those who are new with me to this type of nursing to see if I'm ahead of them, if I'm behind them, am I still with them. I think I'm doing OK compared to the other ones."

"Am I a Critical Care Nurse?"

"I am a nurse."

"I tell people who ask, that I'm a critical care nurse."

"I say I'm a nurse."

"I tell them I'm a nurse."

DEANNA L. REISING

Vita, 1999

EDUCATION:

Doctor of Philosophy, Indiana University, Major-Nursing Science, June 1999
Master of Science, Purdue University, Major-Nursing, December 1989
Bachelor of Science, Indiana University, Major-Nursing, May 1986

EXPERIENCE:

Clinical Assistant Professor, Indiana University, Nursing, 1997-1999
Lecturer, Indiana University, Nursing, 1990-1997
Assistant Director of Nursing, St. Mary Medical Center, Gary, IN, 1990-1991
Clinical Instructor, Indiana University, Nursing, 1989-1990
Critical Care Staff Nurse, St. Mary Medical Center, Hobart, IN, 1989-1990
Medical-Surgical Staff Nurse, St. Mary Medical Center, Hobart, IN, 1986-1989

PROFESSIONAL SOCIETIES:

Midwest Nurses Research Society, 1997-current
Indiana State Nurses Association, 1986-current
 Secretary, District 16, 1996-current
 Legislative District Coordinator, 1994-current
 Board Member, District 16, 1994-1996
 President, District 16, 1992-1994
Sigma Theta Tau International Nursing Honorary, 1986-current

HONORS AND AWARDS:

Teaching Excellence Recognition Award, Indiana University, 1999
Teaching Excellence Recognition Award, Indiana University, 1998
Teaching Excellence Recognition Award, Indiana University, 1997
Who's Who Among American Teachers, 1996
Who's Who Among American Nurses, 1995
Outstanding Faculty Member, BSN class, Indiana University, December 1994
Outstanding Faculty Member, BSN class, Indiana University, May 1992

PUBLICATIONS AND PRESENTATIONS:

Reising, D.L. (1998). Acute hyperglycemia: Putting a lid on the crisis (CEU offering). The Nursing Institute's 1998-99 CE Test Handbook (8), 22-26, 33.

Reising, D.L. (1998). Acute hypoglycemia: Keeping the bottom from falling out (CEU offering). The Nursing Institute's 1998-99 CE Test Handbook (8), 27-32, 34.

Baker, C. M., Reising, D. L., & Johnson, D. R. (1997, November). Measuring organizational effectiveness in schools of nursing: An integrative review. Paper presented at Assessing Program Outcomes, Indianapolis, IN.

Reising, D. L. (1997, October). Retention issues in a cardiovascular recovery unit: Theoretical dimensions. Poster session presented at the Leadership for High Performance Conference, Ann Arbor, MI.

Baker, C. M., Reising, D. L., Johnson, D. R., Stewart, R. L., & Baker, S. L. (1997). Organizational effectiveness: Toward an integrated model for schools of nursing. Journal of Professional Nursing, 13(4), 246-55.

Halstead, J., Hayes, R., Reising, D., & Billings, D. M. (1995). Nursing student information network: Fostering collegial relationships using a computer conference. Computers in Nursing, 13(2), 55-9.

Reising, D.L. (1995). Acute hyperglycemia: Putting a lid on the crisis (CEU offering). Nursing, 25(2), 33-40.

Reising, D.L. (1995). Acute hypoglycemia: Keeping the bottom from falling out (CEU offering). Nursing, 25(2), 41-50.