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Intuition in Nursing: Correlation with Area of Practice and Years of Experience in Registered Nurses in a Rural, Community Hospital

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Intuition in Nursing: Correlation with Area of Practice and Years of Experience in Registered Nurses in a Rural, Community Hospital

by

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Abstract

This study assessed the levels of intuition in nursing in relation to area of practice and years of experience. The goal was to provide data indicating whether or not levels of nursing intuition is affected by area of practice and years of experience in nursing. No relationship was found in regard to levels of intuition in nursing, area of practice, and years of nursing experience. Implications for nurse educators and nurse managers based on this finding suggested the importance of knowing the competency levels and intuitive abilities of nursing staff to help in the decision-making process of initial and ongoing education.

Keywords: nursing, intuition, area of practice, years of experience

Acknowledgments

I would first like to thank Jesus Christ who is my Lord and Savior. In addition, I would like to thank my sweet husband for being by my side and always giving me his love and support. I could not have made it without him! Thank you also to my family, friends, and coworkers who have supported me and given me words of encouragement along the way. Lastly, a special thank you to Dr. Tracy Arnold and Vallire Hooper for all their help and guidance throughout the process of this thesis.

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CHAPTER I

Introduction

Often times nurses will make clinical decisions without concrete proof or evidence that there is a significant change in a patient's condition, but will do so based on a feeling they may have. This feeling is referred to as intuition. Intuition in nursing has been examined and discussed in various healthcare settings to determine its validity when making clinical decisions with patient care (Robert, Tilley, & Petersen, 2014). It has been argued whether nursing intuition is a valid form of knowledge (Green, 2012). Various practice settings along with various levels of nursing experience may determine the levels of intuition that nurses have. The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience.

Significance

Intuition as a valid form of knowledge has been argued since the Institute of Medicine published *To Err is Human* which puts a focus more on evidence-based practice in clinical decision making as opposed to intuitive judgements (Chilcote, 2016). When nurses have made clinical decisions based on intuition, they have not been able to articulate this process. This is because with time and experience, intuition becomes part of a nurse's being which allows them to make valid clinical decisions. Qualitative and quantitative studies have been conducted over the years and have shown positive patient outcomes when applying intuition to clinical decision-making (Chilcote, 2016).

While some experts and theorists have attempted to diminish the validity of intuition in nursing, studies have found that "intuition is in fact a cognitive skill used to assist assessment, causing the nurse to take clinical action leading to patient-centered

care" (Robert et al., 2014, p. 344). Nurses who apply intuition into their everyday nursing practice need to be able to elucidate its implementation in order to justify their clinical decisions and actions. This is because making a clinical decision based on intuition can be inaccurate at times which could then result in an adverse event.

Decisions with patient care should not be made based on intuition alone, but should be combined with objective data and empirical evidence (Holm & Severinsson, 2016). Studies have suggested that intuition in nursing practice exists (Rovithis et al., 2015). This is due to the feelings or gut instincts that nurses experience. These feelings stem from a physical, spiritual, and emotional awareness of the nurse (Rovithis et al., 2015).

Problem Statement

The Institute of Medicine (2011) (as cited in Robert et al., 2014) has identified that nurses need to be able to recognize the acute and severely ill patient to prevent an adverse event and late rapid response. The nurse who has developed an intuition is able to quickly identify and respond to a patient prior to them deteriorating and reach the Institute of Medicine goal of delivering safe and effective care (Robert et al., 2014). However, it is important that nurses do not misuse their ability to apply nursing intuition to clinical practice as mistakes can be made (Holm & Severinsson, 2016).

Purpose

The purpose of this study was to determine if there were differences in nursing intuition levels based on the area of nursing practice and years of nursing experience. The effectiveness of nursing intuition has been studied but there is little information and research "regarding the experiences of nurses using intuition in their decision-making

processes…" (Robert et al., 2014, p. 344). Information regarding this will be important to nurse educators and nurse managers to know the competency levels of their nursing staff.

Research Question

The purpose of this study was to examine the following research question:

What is the relationship between level nursing intuition and area of practice and years of experience in nursing?

Theoretical Framework

Intuition in clinical decision making has been viewed as irrational or guessing judgements, but theorists such as Patricia Benner have argued that intuition is in fact a valid form of knowledge (Benner & Tanner, 1987). Patricia Benner (1982) describes five different stages of nursing based on the Dreyfus Five-Stage Model of Adult Skill Acquisition. The five stages of this model are novice, advanced beginner, competent, proficient, and expert. Within these levels, it is described how nurses provide care based on their level of experience. For example, the novice nurse operates based on rules or guides that have been put into to place and will strictly follow them while the expert nurse is described as having an "intuitive grasp…" on patient situations and provides care based on previous background experiences (Benner, 1982, p. 405).

Within Benner's theory, she also describes "six key aspects of intuitive judgements: pattern recognition, similarity recognition, commonsense understanding, skilled know-how, sense of salience, and deliberative rationality" (Benner & Tanner, 1987, p. 23). Pattern recognition is experienced by both the novice and expert nurse but the expert nurse is able to recognize subtle cues of a pattern while the novice nurse is not

able to do so. Similarity recognition allows the nurse, whether it be novice or expert, to make similar judgments on patient care based on previous clinical experiences. Commonsense understanding "is the basis for understanding the illness experience, in contrast to knowing the disease" (Benner & Tanner, 1987, p. 25). Skilled know-how is when the nurse is able to perform a skill without thinking of the task at hand. Benner and Tanner (1987) gave the example of the expert nurse inserting a urinary catheter and how the expert nurse is able to do so without putting extra thought into the catheter that was to be inserted. It was a fluid motion for the expert nurse and felt part of their being. Sense of salience is the ability to decipher which task is more important. The novice nurse may look at all tasks as being equally important but the expert nurse is able to prioritize effectively. Deliberative rationality is the ability of the proficient and expert nurse to look at different perspectives and make clinical decisions based on the different possibilities. The expert nurse is able to combine all six aspects to make intuitive judgements for clinical decision making (Benner & Tanner, 1987).

Definition of Terms

Intuition. The Meriam-Webster Dictionary (2017) defines intuition as "a natural ability or power that makes it possible to know something without any proof or evidence: a feeling that guides a person to act a certain way without fully understanding why."

Summary

Nurses will often experience a feeling or instinct that guides them to making a clinical decision for patients. Previous studies have shown that nursing intuition is a valid form of knowledge and is a cognitive skill. The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience.

Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff.

CHAPTER II

Literature Review

The purpose of the literature review was to collect and examine previous information and studies related to the topic of nursing intuition while organizing themes that relate to the research question. The following sources were used to locate literature related to the research question: Cumulative Index for Nursing and Allied Health Literature (CINAHL), Google Scholar, ProQuest Nursing & Allied Health Source, and PubMed. The following keywords were searched for the literature review: nursing, intuition, area of practice, novice, expert, and hospital setting.

Literature Related to Problem Statement

Intuition has been described and defined in many ways throughout literature over the years. However, nurses have been encouraged to use knowledge based on evidence-based practice. In an example given by Billay, Myrick, Luhanga, and Yonge (2007), a home health nurse had a feeling that something was wrong with one of her home health patients even though she had rounded on her patient earlier in the day and the patient's vital signs were within normal limits. This feeling became so strong that she called to check on the patient. The patient's daughter answered the phone call and reported to the nurse that she was concerned about her mother. After receiving this information, the nurse went to the patient's house and discovered that the patient was in respiratory distress and had abnormal vital signs and lung sounds. The patient was transported to the hospital and was diagnosed with pneumonia and an exacerbation of her congestive heart failure. The home health nurse was unable to articulate the reason she called to check on her patient and the reason for having the feeling that she did. All that this nurse was able

to explain was that she knew she should check on her patient. The feeling that this nurse had is described as intuition (Billay et al., 2007).

Another example of this intuitive feeling is in a model case presented by Chilcote (2016). In this model case, which is a real-life example, a registered nurse was caring for a patient and began to have a feeling that something was wrong despite the patient having normal lab values and vital signs. This registered nurse could not ignore the bad feeling that she felt and decided to make frequent checks on the patient and placed the code cart outside the patient's room. Upon one of the frequent checks, the nurse found the patient to be unresponsive. The nurse was unable to describe why she had the uneasy and bad feeling but knew that she should not ignore the feeling.

Valid Form of Knowledge

Intuition has been accepted as a valid form of knowledge in professions such as banking, finance, and law enforcement (Chilcote, 2016). However, there is skepticism as to whether it should be accepted as a valid form of knowledge in healthcare. Evidence-based practice has been used and accepted as a valid form of knowledge but not all decisions in healthcare are able to be explained by this method. Two different thought processes, analytical and unconscious, have been described and when they are applied together, they are able to form intuition as a valid form of knowledge (Chilcote, 2016). Analytical processes are those that contain objective data such as lab values and vital signs. Unconscious processes are those that contain subjective data which occur over time with increased experience. It can be hard to validate unconscious processes as this can't be measured and is an abstract concept (Chilcote, 2016). However, intuitive

thinking has been thought of as the same process as when recognizing that a friend is mad or upset (Kahneman &Klein, 2009).

It has been argued that intuition in nursing practice is a valid form of knowledge even though nurses are unable to articulate this process of clinical decision-making (Smith, 2007). Nurses need to be able to recognize when a patient is deteriorating and intervene in a timely manner and this occurs when intuition is applied to clinical decision-making. In a quantitative study containing 87 registered nurses that averaged 10 years of experience in the acute care setting, it was examined as to whether or not intuition played a role in activating the rapid response team in their hospital to respond to a deteriorating patient (Parker, 2014). In this study, no significant differences were found in those who applied intuition, and in fact those nurses who were strictly analytical thinkers activated the rapid response team more often (Parker, 2014).

Intuitive feelings can be experienced in the early interaction phase with a patient and should not be ignored. Just as nurses can experience intuitive feelings, so can patients as well. While this is also not seen as credible due to patients being unable to articulate the process, these intuitive feelings should be considered to promote shared decision-making (Buetow & Mintoft, 2010). Dhaliwal (2010) has questioned as to whether or not intuition is part of a person's neural hardwiring. This does not mean that nurses do not need to use analytical thinking and apply nursing judgements based on evidence-based practice but this also means that evidence-based practice should not limit nursing practice (Green, 2012). In a qualitative study by Traynor, Boland, and Buus (2010), 26 practicing nurses were interviewed and asked questions as to how they went about making clinical decisions. Results of this study showed that these nurses made clinical decisions not only

based on instinct and intuition, but were also made based on past experiences (Traynor et al., 2010).

Area of Practice

There are various areas of nursing practice that require nurses to take quick action in difficult situations. If they are unable to do so then the patient can suffer from an adverse event. Areas such as the Emergency Department and the Intensive Care Unit care for patients that can deteriorate quickly if the nursing staff is unable to pick up on subtle cues that do not include laboratory values and vital signs. This can be different for areas such as a medical-surgical unit that typically do not contain critically ill patients or the necessary monitoring equipment to identify changes in a patient's medical condition.

Rovithis et al. (2015) used the Smith Intuition Instrument questionnaire in a correlation study regarding intuition levels based on area of practice within two state hospitals. In this study, 122 members of nursing staff including nursing aides were selected to participate. After completion of the study, it was revealed that there was not a significant difference between the intuition levels of nursing based on area of practice and years of experience, but there were significant intuition levels in nursing practice (Rovithis et al., 2015). As a result, it was suggested that more studies be conducted using the same instrument to include more hospitals or to develop an alternative instrument.

Literature Related to Theoretical Framework

When considering intuition as a valid form of knowledge, the question has been asked as to what type of nurse is able to apply this type of knowledge in making clinical decisions? Benner (1982) describes various levels of nursing beginning from novice and developing to expert. In a qualitative study consisting of 105 nurses practicing in various

hospital units in eight different hospitals in three metropolitan areas, advanced beginner, intermediate (competent and proficient), and expert nurses were interviewed (Billay et al., 2007). This study revealed that the advanced beginner focused on tasks that were to be performed and would become distressed if faced with a situation that did not have an immediate task to follow. The intermediate nurse would seek answers to questions to gather more information about a clinical situation. During this phase, these nurses were beginning to realize that it may not be best to strictly follow physician orders without questioning. The expert nurse contained a wealth of knowledge and experience that would allow for the nurse to recognize urgent situations that required immediate intervention based on intuition.

Incorporating concepts from Patricia Benner's Theory of Skill Acquisition within this research study provided a theoretical basis for the importance of understanding levels of intuition in clinical decision-making. Robert et al. (2014) presented a model case describing a new graduate nurse who was caring for a patient that was admitted with a diagnosis of pneumonia. The patient pressed their call light reporting that they were having chest pain and shortness of breath. The new graduate nurse examined the patient and noted the patient to have increased crackles and associated the chest pain and shortness of breath with the patient's diagnosis of pneumonia. Approximately 30 minutes later, the same patient pressed their call light for a second time and an experienced nurse on the unit answered. The patient again reported chest pain and shortness of breath. This experienced nurse that responded, examined the patient and initiated the unit's chest pain protocol and the patient was noted to be having a myocardial infarction. The new graduate nurse was not able to critically think that this patient could be experiencing a

separate medical condition, but the experienced nurse knew to critically think and further investigate the patient's complaint.

Patricia Benner describes five levels of nursing beginning from novice and developing into the expert nurse. With time and experience, the novice nurse will begin to develop into an expert nurse and with that comes intuitive thinking due to their ability to recognize patterns or cues to alert them of changes in a patient's condition (Bjork & Hamilton, 2011). In a qualitative study of 1,460 nurses in seven countries, clinical decision-making was affected depending on the nurses' years of experience (Bjork & Hamilton, 2011). It was noted that the nurses were more intuitive when they had more experience. Benner has described intuition as an art rather than a science as way to examine intuition as a holistic approach to nursing care and clinical decision-making (Blum, 2010). Often times, clinical decisions are made based on incomplete data and probability. Science is not applied to this decision-making approach and can then be described as an art (Taylor, Dowding, & Johnson, 2017).

The ability to apply intuitive thinking into clinical decision-making has been linked to the expert nurse as described by Benner (Smith, 2007). This type of clinical decision-making becomes part of a nurses being and they are able to apply this without thinking about the actions they are taking. It is a fluid process that has become intertwined with a nurse's being and practice (Lyneham, Parkinson, & Denholm, 2008). In a phenomenological study conducted by Lyneham et al. (2008), 14 Emergency Department nurses were interviewed over a three-year period. This study revealed three themes: knowledge, experience, connection, feeling, syncretism, and trust. These themes "explain the nature of intuition…" (Lyneham et al., 2008 p. 383). The expert nurse is able

to practice using intuitive feelings based on previous knowledge and experience (Banning, 2007). The novice nurse is not able to effectively do so due to lack of experience and knowledge and will seek out the expert nurse when decisions have to be made that are outside of physician orders or protocols (Gillespie & Paterson, 2009). However, the novice nurse is likely to use intuitive thinking if they are older or have been hospitalized themselves (Holm & Severinsson, 2016). While it has been proven that the use of intuition increases with experience, in four qualitative studies, it was found that those nurses tend to have an area of specialty that they practice in (Holm & Severinsson, 2016).

Strengths and Limitations of Literature

While there have been numerous studies previously mentioned in regard to intuition in nursing, these studies are limited in their research. Limited studies have been found to document a correlation of levels of nursing intuition based on years of experience and area of practice. In order to effectively evaluate whether or not years of experience and area of practice play a factor in applying intuition to clinical decision-making, more studies need to be conducted to focus on these two factors. The current studies available are mostly self-reported by nurses and because of this method, the accuracy of the application of intuition is thought to be invalid.

Summary

The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience. Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff. There were limitations in the research and

previous studies in linking years of experience and area of practice to the levels of intuition.

CHAPTER III

Methodology

The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience. This chapter includes the research design, setting, sample, protection of human subjects, instruments, data collection procedure, and data analysis used to conduct this research study.

Research Design

A descriptive, correlational study was designed to quantitatively assess the relationship between levels of intuition in nursing, area of practice, and years of experience.

Setting

The research study was conducted in a rural area community based hospital in the western region of North Carolina containing a total of 65 general, acute care beds. The hospital consists of various units including an Emergency Department, Medical-Surgical Unit, Intensive Care Unit, Operating Room, PACU, and Labor and Delivery Unit. Approximately 115 registered nurses work in the units listed.

Sample

A convenience sample of 115 registered nurses were asked to participate from the Emergency Department, Medical-Surgical Unit, Intensive Care Unit, Operating Room, PACU, Labor and Delivery Unit, or any other inpatient unit within the rural, community hospital. The sample represented a wide array of registered nursing ranging from young to retirement age adults. Permission to solicit participants was obtained from the chief nursing officer of the hospital.

Protection of Human Subjects

An application to complete this study was submitted to both the Hospital's and University's Institute Research Boards (IRB) and was approved prior to data collection. There were minimal to no risks to the participants of this study. The benefit of this study was to potentially enable nursing staff to utilize intuition in their nursing practice in conjunction with provided evidence of a patient's medical condition. Participants received a consent form (Appendix A) informing them of the purpose of the study along with their right to refuse to participate without penalty and their right to discontinue participation in the research study at any time without penalty. Nursing staff were advised that their responses to the questionnaire would have no effect on their employment status and that no results would be placed in their employee record. Participants were not required to include their name on the Smith Intuition Instrument questionnaire.

Instruments

Participants were asked to complete a demographic tool (Appendix B) created by the primary investigator and the Smith Intuition Instrument questionnaire (Appendix C) developed by Dr. Anita Joel Smith. The demographic tool collected information related to area of practice and years of nursing experience. The Smith Intuition Instrument contained 18-items based on a five point Likert scale with options ranging from (1) never, (2) rarely, (3) sometimes, (4) often, and (5) always. Participants were instructed to choose responses reflecting the frequency of behaviors experienced when practicing in the clinical setting. The purpose of using the Smith Intuition instrument was to measure a nurse's intuitive ability when reflecting on patient care scenarios. In a previous study conducted by Dr. Anita Smith to clarify factors involved in intuition and test the

instruments validity, a Cronbach's alpha of 0.896 was revealed (Smith, 2007). Scoring ranges from as low as 18 and as high as 90. Scores of 18 to 42, with 18 being the lowest score possible, are rated as having low amount of intuition. Scores of 43 to 66 are rated as having a medium amount of intuition and scores of 67 to 90, with 90 being the highest score possible, are rated as having a high amount of intuition (Smith, 2007).

Data Collection Procedure

The consent form, demographic tool, Smith Intuition Instrument questionnaire, and debriefing statement (Appendix D) were administered via Survey Monkey®. Participants received the survey via their employee email address and were allotted one week to complete the survey. The data collected from the survey were organized on a Microsoft Excel Spreadsheet and saved via a password encrypted flash drive and placed in a locked file box. The researcher organized the data according to number of years working as a nurse, area of practice, and number of years working on their current unit.

Data Analysis

Participant responses to each question on the Smith Intuition Instrument questionnaire were entered in a Microsoft Excel Spreadsheet and later transferred to an SPSS program to analyze the data. The purpose of using an SPSS program was to analyze the data and determine if a relationship existed between years of experience in nursing and area of practice.

Summary

The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience. The goal was to provide data indicating whether or not levels of nursing intuition is affected by area of practice and

years of experience in nursing. Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff.

CHAPTER IV

Results

The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience. Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff. This chapter will report the data collected to answer the following research question: What are the levels of nursing intuition based on area of practice and years of experience in nursing?

Sample Characteristics

On the day the survey was administered, a link to Survey Monkey® containing the Smith Intuition Instrument and demographic tool was sent via email to 115 registered nurses at a rural, community hospital in western North Carolina. The sample of 115 registered nurses were asked to participate from the Emergency Department, Medical-Surgical Unit, Intensive Care Unit, Operating Room, PACU, Labor and Delivery Unit, and any other inpatient unit within the rural, community hospital. The survey was available for completion for one week. When the survey was closed, it was documented that 50 participants had agreed to complete the survey for a response rate of 43%. However, when analyzing the responses to the survey, it was discovered that 11 participants had responded "yes" they would like to participate but did not fully complete the Smith Intuition Instrument and/or demographic tool. Thus, of the 50 surveys that were originally obtained, only 39 were able to be utilized to complete this study. In the final sample (n=39), there were 43 (85%) female registered nurses and six (15%) male registered nurses. It was also noted of the final sample (n=39), there were 13 (33%)

registered nurses that work in the Emergency Department, 10 (26%) on the Medical-Surgical unit, four (10%) on the Intensive Care Unit, three (8%) in the Operating Room, two (5%) on the Post Anesthesia Care Unit, six (15%) on the Labor and Delivery Unit, and then one (3%) participant that chose "other". The average of years that the participants have worked as registered nurses was 13.77 years with a minimum of two years and a maximum of 33 years.

Table 1

Descriptive Statistics of the Sample (n=39)

Demographics	N	Percentage
Gender		
Male	6	15
Female	33	85
Area of Practice		
Emergency Department	13	33
Medical-Surgical	10	26
Intensive Care	4	10
OR	2	5
PACU	3	8
Labor & Delivery	6	15
Other	1	3

Major Findings

Descriptive statistics were used to determine the levels of nursing intuition. The Smith Intuition Instrument contains responses on a Likert-scale of 1-5 with "1" representing never experiencing the response and "5" representing always experiencing the response. Responses on the Smith Intuition Instrument ranged from 40 to 70. The potential range of responses was 18 - 90 for the instrument. Figure 1 provides a scatterplot graph illustrating the distribution of the Smith Intuition Scores.

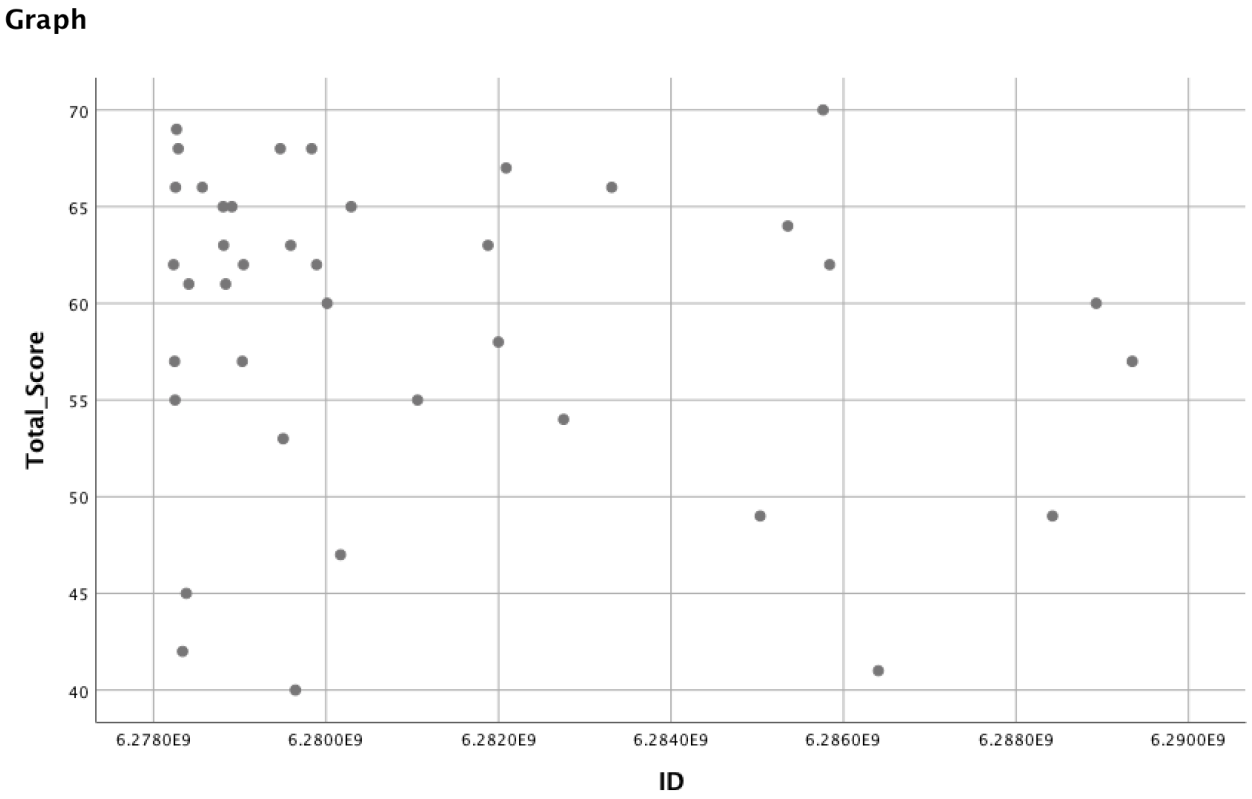

Figure 1. Distribution of the Smith Intuition Instrument Scores. This figure illustrates the distribution of the Smith Intuition Instrument Scores.

The mean Smith Intuition Instrument score for the sample was 59.10 (*sd* = 8.146). According to Dr. Anita Joel Smith, who created the instrument, scores between 43 and 66 represent a medium level of nursing intuition. Therefore, the sample mean of 59.10 represents a medium level of nursing intuition.

An examination of frequencies and means of responses for each question reveals more details regarding nursing intuition (see Tables 2 and 3). Twenty-one (53.8%) of participants indicated that they often felt a spiritual connection with their patients. Questions 5, 11, 14, 15, and 17 reveals the presence of reassuring feelings. On question five, 25 (64.1%) of participants reported that they often get a calm feeling when they know things will be okay. Question 11 reported that 20 (51.3%) of the participants reported that they often get a peaceful feeling when their patient is stable. For both questions 14 and 15, 21 (53.8%) participants reported that they often had good and encouraging feelings when their patient was okay or stable. The lowest mean response of 2.0 was found on question four. Thirty-seven (98.4%) of participants responded with either 1 (never), 2 (rarely), or 3 (sometimes) when asked if they get nauseous when something is wrong.

Table 2

Mean Ratings of the Smith Intuition Instrument Items

Question	Mean Rating
1. I get a shiver down my spine when I think something is wrong with my patient.	2.61
2. I get an uneasy feeling about a patient's condition.	3.49
3. I connect with my patients at the soul level.	3.44
4. I get nauseous when something is wrong.	2.00
5. I get a calm feeling when I know things will be okay.	4.08
6. The hair on my arms and neck stand up when something is wrong.	2.46
7. I get a bad feeling about a patient's condition.	3.46
8. I sense a spiritual connection with my patient.	3.28
9. I get a nagging feeling about a patient's condition.	3.13
10. I experience a deep connection with my patient.	3.36
11. I get a peaceful feeling when I know my patient is stable.	4.21
12. I get a lump in my throat when I know something is wrong with my patient.	2.59
13. I sense an energy field around my patient.	2.36
14. I experience good feelings when my patient is okay.	4.31
15. I feel encourage when my patient is stable.	4.31
16. I do not need verbal communication to sense a spiritual connection to my patient.	3.38
17. I feel relieved when my patient is stable	4.13
18. I sense energy coming from my patients.	2.54

Table 3

Frequencies of Responses to Questions 1-18 on the Smith Intuition Instrument

Question	Rating of 1 (Never)	Rating of 2 (Rarely)	Rating of 3 (Sometimes)	Rating of 4 (Often)	Rating of 5 (Always)
1. I get a shiver down my spine when I think something is wrong with my patient.	5	13	13	8	0
2. I get an uneasy feeling about a patient's condition.	0	3	17	16	3
3. I connect with my patients at the soul level.	1	4	12	21	1
4. I get nauseous when something is wrong.	12	13	10	2	0
5. I get a calm feeling when I know things will be okay.	0	1	4	25	9
6. The hair on my arms and neck stand up when something is wrong.	8	11	15	4	1
7. I get a bad feeling about a patient's condition.	0	1	17	17	2
8. I sense a spiritual connection with my patient.	1	4	17	17	0
9. I get a nagging feeling about a patient's condition.	3	4	18	13	1
10. I experience a deep connection with my patient.	1	3	17	17	1

Question	Rating of 1 (Never)	Rating of 2 (Rarely)	Rating of 3 (Sometimes)	Rating of 4 (Often)	Rating of 5 (Always)
11. I get a peaceful feeling when I know my patient is stable.	0	1	4	20	14
12. I get a lump in my throat when I know something is wrong with my patient.	5	12	16	6	0
13. I sense an energy field around my patient.	10	10	14	5	0
14. I experience good feelings when my patient is okay.	0	0	3	21	15
15. I feel encourage when my patient is stable	0	0	3	21	15
16. I do not need verbal communication to sense a spiritual connection to my patient.	1	5	13	18	2
17. I feel relieved when my patient is stable	0	0	5	24	10
18. I sense energy coming from my patients.	9	9	12	9	0

To assess the relationship between levels of nursing intuition and years of nursing experience, a bivariate correlation test was conducted using the Pearson Correlation coefficient. The purpose of this part of the analysis was to determine if a relationship existed among levels of nursing intuition and years of nursing experience with a direct comparison between the Smith Intuition Instrument total scores and years of reported nursing experience. The correlation coefficient was 0.070, which is very poor and does not show a linear correlation between the variables. Figure 2 illustrates the scatterplot graph used to examine if a correlation exists between levels of nursing intuition and years of nursing experience.

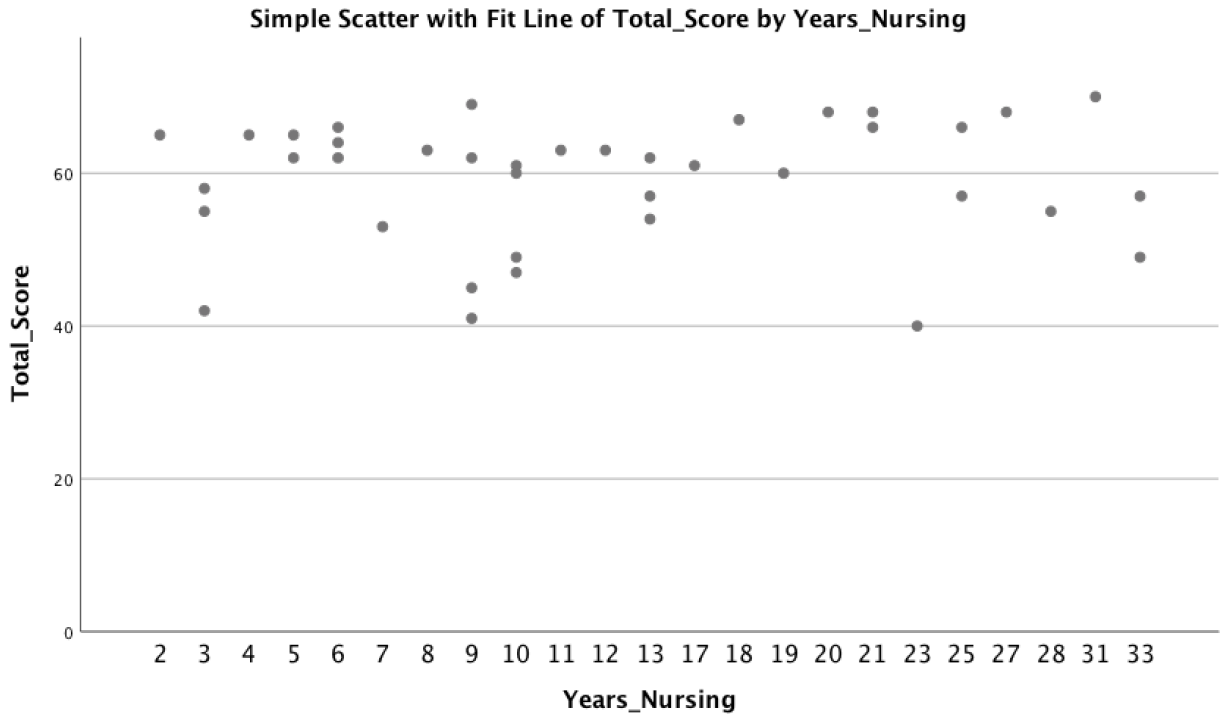

Figure 2. Levels of Nursing Intuition vs. Years of Nursing Intuition. This figure illustrates a scatterplot graph of the total scores on the Smith Intuition Instrument and the reported years of nursing experience.

To assess the relationship between levels of nursing intuition and area of nursing practice, a One-way ANOVA test was performed. The purpose of this part of the analysis was to determine if a relationship existed among levels of nursing intuition and area of nursing practice with a direct comparison between the Smith Intuition Instrument total scores and reported area of nursing practice. A p-value of 0.862 was revealed and at $\propto$=0.05 level of significance, it can be determined that there is not a significant difference in the levels of nursing intuition based on area of nursing practice. Figure 3 illustrates the boxplot graph used to examine if levels of nursing intuition varies depending on area of nursing practice.

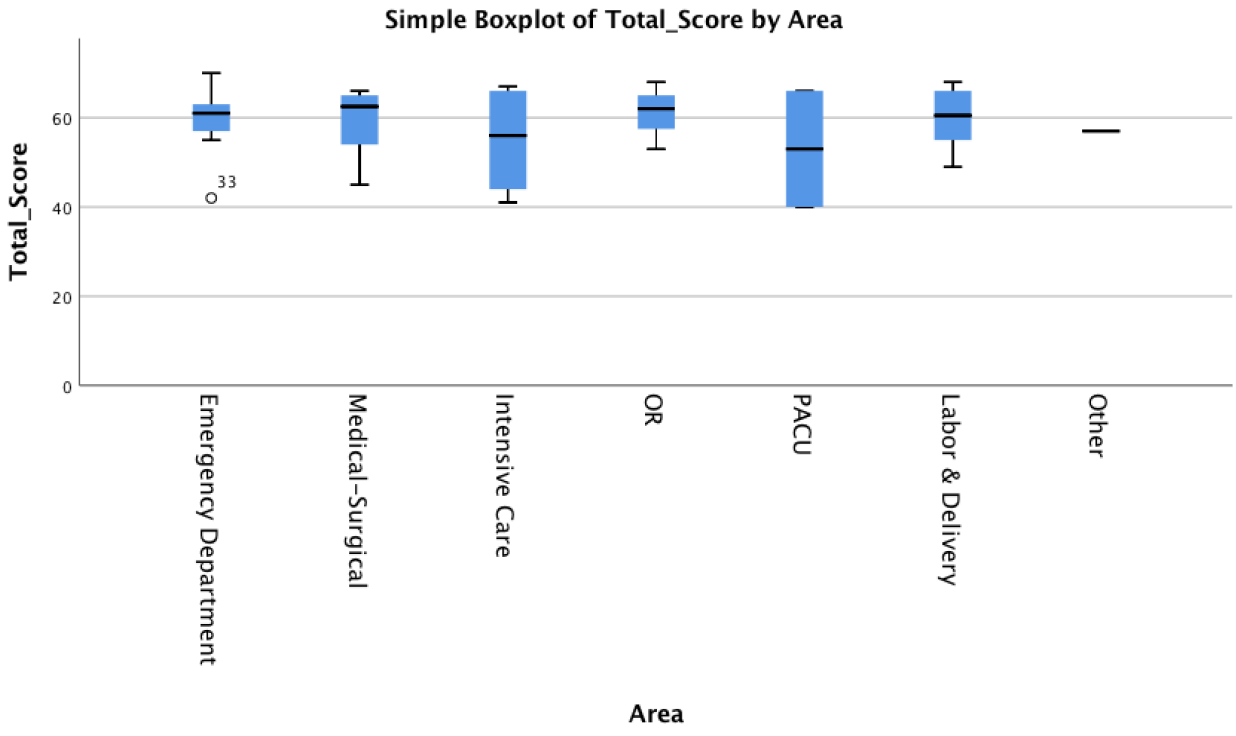

Figure 3. Levels of Nursing Intuition vs. Area of Nursing Practice. This figure illustrates a boxplot graph used to examine if levels of nursing intuition varies depending on area of nursing practice

Summary

The collected data provided information to determine: (1) The levels of intuition in registered nurses at a rural, community hospital in Western North Carolina, (2) Is there a correlation between the levels of nursing intuition and years of nursing experience? And (3) Is there a relationship between the levels of nursing intuition and area of nursing practice. From the data provided, it was determined that the levels of nursing intuition of the registered nurse sample (n=39) was 59.10 out of a range from 18 – 90 indicating a medium level of nursing intuition. A bivariate correlation using the Pearson Correlation coefficient revealed a correlation of 0.070 determining that there was no correlation between the levels of nursing intuition and years of nursing experience. A One-way ANOVA test revealed a p-value of 0.862 and at $\propto$=0.05 level of significance, it can be determined that there is no correlation between the levels of nursing intuition and area of nursing practice.

CHAPTER V

Discussion

The purpose of this study was to assess the levels of intuition in nursing in relation to area of practice and years of experience. The goal was to provide data indicating whether or not levels of nursing intuition is affected by area of practice and years of experience in nursing. Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff.

Implication of Findings

From the data collected in this study, the mean level of intuition in registered nurses in a rural, community hospital (n=39) was 59.10 indicating a medium level of nursing intuition. Although the findings of this study suggested that there were medium levels of nursing intuition, there was no significant relationship between years of nursing experience and area of nursing practice. For nurse educators and nurse managers, this study implies that years of nursing experience and area of nursing practice do not influence levels of nursing intuition.

Nurse educators and nurse managers may want to spend more time performing a gap analysis to help with developing an orientation plan for newly hired registered nurses and to also develop ongoing competencies for current registered nurses. Knowing the competency levels and intuitive abilities of nursing staff helps in the decision-making process of initial and ongoing education. Questions 5, 11, 14, 15, and 17 revealed that reassuring feelings were felt when knowing that a patient was stable

and okay. These findings may be particularly helpful in knowing that nursing staff are able to recognize normal findings of a patient.

Application to Theoretical Framework

The theoretical framework developed by Patricia Benner (1982) was utilized for this study. Benner argued that intuition is in fact a valid form of knowledge (Benner & Tanner, 1987). Registered nurses in this study expressed intuitive feelings when taking care of patients in the inpatient clinical setting. The Dreyfus Five-Stage Model of Adult Skill Acquisition referenced by Benner (1982) examined the relationship between experience level and intuitive ability. The five stages of this model are novice, advanced beginner, competent, proficient, and expert. Within these levels, it is described how nurses provide care based on their level of experience. Intuitive feelings were expressed by the sample of registered nurses (n=39) although years of nursing experience and area of practice did not seem to have an effect on this ability.

Limitations

Generalizability was limited due to the small sample size, convenience sampling, and the use of one hospital setting. The study may have been strengthened if registered nurses from additional rural, community hospitals had been recruited. Statistical analysis of levels of intuition was only completed between the two variables of years of nursing experience and area of nursing practice without incorporating other variables that could impact levels of nursing intuition.

Implications for Nursing

The following are implications for nurse educators and nurse managers based on findings of this descriptive study:

1. Perform an ongoing, yearly gap analysis to determine competency level and intuitive ability of current nursing staff to determine needs for education.
2. Perform an initial gap analysis to determine initial competency levels and intuitive ability of newly hired nursing staff to better develop an orientation plan best suited for their needs.
3. Encourage the use to intuitive feelings in conjunction with concrete proof or data such as laboratory studies and vital signs.

Nurse educators and nurse managers are responsible for identifying the competency level of current and newly hired nursing staff. It is imperative for both nurse educators and nurse managers to know the initial and ongoing competency level of staff and to also know their intuitive ability to recognize stable and unstable patient situations.

Recommendations

There are several recommendations for further study regarding levels of nursing intuition based on area of practice and years of nursing experience. Beneficial data could be obtained by repeating the study at additional rural, community hospitals to examine the possible relationship between levels of nursing intuition, years of nursing experience, and area of nursing practice. It may also be beneficial to complete the study within the multiple hospitals that are under the same hospital organization. These sample groups may experience other factors such as resource availability that may

influence their intuitive ability. Additional demographic variables could be correlated with levels of intuition such as the nurse's perception of their own intuitive ability.

Conclusion

The purpose of this study was to assess the levels of intuition in nursing in relation to areas of practice and years of experience. Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff. Based on the data collected, nurse educators and nurse managers should continually assess the competency of their nursing staff to include intuitive ability and its application to nursing practice.

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Appendix A

Informed Consent to Participate in Research

Invitation: Leah Frady is a graduate student in the Master of Science in Nursing program at Gardner-Webb University and would like to invite you to participate in a research study. She is being guided in this research by Dr. Tracy Arnold.

Purpose: The purpose of this study is to assess the different levels of nursing intuition based on area of practice and years of nursing experience.

Description of Research Study: As a participant in this study, you will be asked to complete a demographic survey and the Smith Intuition questionnaire. Your participation in this study will take approximately 10-15 minutes. Your decision to participate or not to participate will have no effect on your employment status. In addition, your responses will have no effect on your employment status.

Risks and Benefits: There are minimal risks to you in this research study; however, if you should become distressed from answering the questions, please contact the Employee Assistance Program at 1.**800.454.1477**. There are no direct benefits from participating in this research; however, it is hoped that your participation will provide a better understanding of nursing intuition.

Confidentiality: All information obtained in this study is strictly confidential unless required by law. The results of this research may be used in reports, presentations, and publications, but the researcher will not identify you. Your name will not be required to complete the survey.

Compensation: This study does not involve any type of compensation.

Question/Contact Information: If you have any questions about this research study you may contact Leah Frady at 828-803-9904 or lhancock@gardner-webb.edu and/or Dr. Tracy Arnold (thesis advisor) at 704-406-4359 or tarnold@gardner-webb.edu. If you have concerns about your rights or treatment, or the risks and benefits related to this study you may contact the Gardner-Webb University Institutional Review Board at 704-406-4724.

Consent: Completion of the survey implies your consent for participation in the study. Participation in this study is voluntary and participants may withdraw from the study at any time without penalty. If you do not want to participate in this study, please discard this survey.

Appendix B

Demographics

Gender
- Male
- Female

Age in Years _____

Highest Degree Earned
- Diploma in Nursing
- Associates Degree
- Bachelor's Degree
- Master's Degree
- Doctoral Degree

Years Working as a Nurse _____

Area of Practice
- Emergency Department
- Medical-Surgical
- Intensive Care
- OR
- PACU
- Labor & Delivery
- Other:_____

Years Worked in Your Current Area of Practice? _____

Current Employment Status
- Full-Time
- Part-Time
- PRN

Do You Have a Specialty Certification?
- Yes
- No

How would you rank your proficiency level?
- Novice
- Advanced Beginner
- Competent
- Proficient
- Expert

Appendix C

The Smith Intuition Instrument

The Smith Intuition Instrument

Directions: Please select the response that best reflects the frequency of the following behaviors as they apply to your clinical experiences and life experiences.

Intuition Items:	**Never 1**	**Rarely 2**	**Sometimes 3**	**Often 4**	**Always 5**
1. I get a shiver down my spine when I think something is wrong with my patient.					
2. I get an uneasy feeling about a patient's condition.					
3. I connect with my patients at the soul level.					
4. I get nauseous when something is wrong.					
5. I get a calm feeling when I know things will be okay.					
6. The hair on my arms and neck stand up when something is wrong with my patient.					
7. I get a bad feeling about a patient's condition.					
8. I sense a spiritual connection with my patient.					
9. I get a nagging feeling about a patient's condition.					
10. I experience a deep connection with my patient.					
11. I get a peaceful feeling when I know my patient is stable.					
12. I get a lump in my throat when something is wrong with my patient.					
13. I sense an energy field around my patient.					
14. I experience good feelings when my patient is okay.					
15. I feel encouraged when my patient is stable.					
16. I do not need verbal communication to sense a spiritual connection with my patient.					
17. I feel relieved when my patient is stable.					
18. I sense energy coming from my patient.					

Appendix D

Debriefing Statement

Thank you for your participation in this research on nursing intuition. The study you have just completed was to assess the levels of intuition in nursing in relation to area of practice and years of experience. The 18-question survey allowed you to select the frequency of various behaviours as they apply to your clinical experiences and life experiences. Information regarding levels of intuition will be important to nurse educators and nurse managers to know the competency levels of their nursing staff.

If you have any questions about the study, please feel free to contact Leah Frady at 828-803-9904 or lhancock@gardner-webb.edu and/or Dr. Tracy Arnold (thesis advisor) at 704-406-4359 or tarnold@gardner-webb.edu.