

“SEE EVERYTHING, HEAR WHAT IS NOT BEING SAID”: A
PHENOMENOLOGICAL INVESTIGATION OF INTUITION IN
NOVICE REGISTERED NURSING PRACTICE

A Thesis in
Adult Education

by

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ABSTRACT

Knowing is multifaceted and encompasses several different ways to process information. Ways of knowing that lay outside of the rational domain such as intuitive, spiritual, emotional, tacit, and unconscious knowing, have traditionally been ignored and silenced in the traditional obsession with objective, positivistic, and rationalistic knowing. In the field of nursing, it is recognized that in practice expert nurses use many different sources of knowledge too gain a holistic perspective of their patient situation, to guide their decision-making and inform patient care. Inclusion of novice nurses in previous research on intuition has been very limited.

Therefore, the primary purpose of this interpretive Heideggarian phenomenological study was to discover the meaning of intuitive knowing to novice registered nurses. Secondly, it was intended to identify how the use of intuitive knowing impacts their practice. Sixteen nurses, twelve females and four males representing a variety of clinical specialties were interviewed. Cognitive learning theory and Women’s Ways of Knowing guided this theory theoretically. The methods of data collection were in-depth interviews using a semi-structured interview guide, as well as documents and artifacts. The interviews were tape recorded and transcribed verbatim. When analyzing the data, a constant comparative technique was utilized.

The findings of this study revealed that these novice nurses defined intuition as being a “gut feeling” and identified multiple sources of intuition. They contextualized intuition based on previous life and job experiences and were influenced by intuitive mentors. When accessing intuition the novice nurses felt this was dependent on their self-trust, whether or not they trusted their colleagues and patients, their ability to
reposition themselves in time and space to connect with their patients and lastly, patient variables. Outcomes of using intuition in practice were noted to be that it guided their decision-making, enhanced holistic patient care, influenced their navigating around and between professional relationships and enhanced their ability to deal with limited hospital and human resources. Lastly, the novice nurses shared that the culture of nursing education and practice continues to reify the medical model and give mixed messages regarding accepted ways of knowing. Many ways the novice nurses dealt with and unlearned fear associated with nonrational ways of knowing as well as the desire to find a balance among intuition, science and other ways of knowing were also shared. Based on these findings that emerged, implications for nursing education and practice are presented.
# TABLE OF CONTENTS

| LIST OF TABLES | x |
| LIST OF ILLUSTRATIONS | xi |
| ACKNOWLEDGEMENTS | xii |

## Chapter 1. INTRODUCTION AND PURPOSE .................................................. 1

- Background of the Problem ................................................................. 3
- Purpose of the Research ........................................................................ 8
- Guiding Research Questions .................................................................. 9
- Conceptual / Theoretical Framework .................................................. 10
- Overview of the Research Methods and Design ................................... 11
- Significance of the Study ..................................................................... 14
- Assumptions and Limitations of the Study .......................................... 19
- Definition of Terms ............................................................................. 21
- Organization of the Study .................................................................... 23

## Chapter 2. REVIEW OF THE LITERATURE .................................................. 24

### Section I: The Theoretical Framework: Cognitive Learning Theory .......... 24

- Cognitive Learning Theory and Information Processing ..................... 25
- Theoretical Models of Intuition ............................................................. 33
  - Modes of Thought ........................................................................... 34
  - Neuroscience ............................................................................... 39
- Legitimization and Resistance to Intuition as a Legitimate Way of Knowing ................................................................. 42
  - Institutional Resistance .................................................................. 43
  - Personal Resistance ....................................................................... 45
- Existing Tools to Measure Intuition ..................................................... 47
- Summary ............................................................................................ 50

### Section II: The Concept of Intuition ...................................................... 51

- Historical Perspective of the Development of Intuition ...................... 52
  - Ancient Views of Intuition .............................................................. 53
  - The Middle Ages ............................................................................ 56
  - The Renaissance Period ................................................................. 57
  - The Nineteenth Century ................................................................. 58
  - The Twentieth Century .................................................................... 60
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining Intuition: The Conceptual Chameleon</td>
<td>64</td>
</tr>
<tr>
<td>Intuition the ‘conceptual chameleon’</td>
<td>66</td>
</tr>
<tr>
<td>Defining Attributes and Characteristics of Intuition</td>
<td>72</td>
</tr>
<tr>
<td>Defining Attributes</td>
<td>72</td>
</tr>
<tr>
<td>Types of Intuitive Awareness</td>
<td>74</td>
</tr>
<tr>
<td>Levels of Intuitive Awareness</td>
<td>77</td>
</tr>
<tr>
<td>Voices of Intuition</td>
<td>78</td>
</tr>
<tr>
<td>Characteristics of Intuitive Individuals</td>
<td>80</td>
</tr>
<tr>
<td>Summary</td>
<td>82</td>
</tr>
<tr>
<td>Section III: Use of Intuition in Various Related Disciplines</td>
<td>82</td>
</tr>
<tr>
<td>Intuition in Psychology and Counseling</td>
<td>83</td>
</tr>
<tr>
<td>Intuition in Philosophy / Religion / Spirituality</td>
<td>84</td>
</tr>
<tr>
<td>Intuition in Mathematics and Physical Sciences</td>
<td>85</td>
</tr>
<tr>
<td>Intuition in Business, Leadership and Management</td>
<td>87</td>
</tr>
<tr>
<td>Intuition in Medicine and Nursing</td>
<td>90</td>
</tr>
<tr>
<td>Intuition in Nursing Education</td>
<td>93</td>
</tr>
<tr>
<td>Summary</td>
<td>95</td>
</tr>
<tr>
<td>Section IV: The Concept of Novice</td>
<td>96</td>
</tr>
<tr>
<td>Novice Defined</td>
<td>96</td>
</tr>
<tr>
<td>Expert versus Novice use of Intuition</td>
<td>98</td>
</tr>
<tr>
<td>Data -Based Studies of Intuition in Novice Practice</td>
<td>100</td>
</tr>
<tr>
<td>Quantitative Studies Involving Novice Nurses</td>
<td>100</td>
</tr>
<tr>
<td>Qualitative Studies Involving Novice Nurses</td>
<td>101</td>
</tr>
<tr>
<td>Summary</td>
<td>106</td>
</tr>
<tr>
<td>Chapter 3 METHODOLOGY</td>
<td>108</td>
</tr>
<tr>
<td>Restatement of the Purpose of the study</td>
<td>108</td>
</tr>
<tr>
<td>Research Questions</td>
<td>108</td>
</tr>
<tr>
<td>Research Design Overview</td>
<td>108</td>
</tr>
<tr>
<td>Overview of Qualitative Research</td>
<td>108</td>
</tr>
<tr>
<td>Phenomenology as a Research Methodology</td>
<td>112</td>
</tr>
<tr>
<td>Participant Selection and Ethics of Confidentiality</td>
<td>115</td>
</tr>
<tr>
<td>Data Collection and Analysis Methods</td>
<td>117</td>
</tr>
<tr>
<td>In-depth Interviews</td>
<td>118</td>
</tr>
<tr>
<td>Documents and Artifacts</td>
<td>120</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>121</td>
</tr>
<tr>
<td>Credibility and Trustworthiness</td>
<td>125</td>
</tr>
<tr>
<td>Credibility as Internal Validity</td>
<td>125</td>
</tr>
<tr>
<td>Dependability as Reliability</td>
<td>128</td>
</tr>
<tr>
<td>Transferability and Relevance to Other Settings</td>
<td>128</td>
</tr>
<tr>
<td>Summary</td>
<td>129</td>
</tr>
</tbody>
</table>
## Chapter 4  INTRODUCTION OF THE PARTICIPANTS

Profiles of the Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam</td>
<td>131</td>
</tr>
<tr>
<td>Allison</td>
<td>133</td>
</tr>
<tr>
<td>Austin</td>
<td>134</td>
</tr>
<tr>
<td>Diane</td>
<td>135</td>
</tr>
<tr>
<td>Emma</td>
<td>137</td>
</tr>
<tr>
<td>Ethan</td>
<td>139</td>
</tr>
<tr>
<td>Helen</td>
<td>140</td>
</tr>
<tr>
<td>Jordan</td>
<td>142</td>
</tr>
<tr>
<td>Kaitlyn</td>
<td>143</td>
</tr>
<tr>
<td>Karen</td>
<td>145</td>
</tr>
<tr>
<td>Kylee</td>
<td>146</td>
</tr>
<tr>
<td>Lily</td>
<td>147</td>
</tr>
<tr>
<td>Linda</td>
<td>149</td>
</tr>
<tr>
<td>Olivia</td>
<td>150</td>
</tr>
<tr>
<td>Tina</td>
<td>151</td>
</tr>
<tr>
<td>Tonya</td>
<td>153</td>
</tr>
</tbody>
</table>

Summary: 155

## Chapter 5  PRESENTATION OF RESEARCH RESULTS

Section I. Contextualizing and Defining Intuition

<table>
<thead>
<tr>
<th>DATA DISPLAY</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Important Role of Intuitive Mentors</td>
<td>158</td>
</tr>
<tr>
<td>Intuition as a “Gut Feeling” and Pinpointing its Sources</td>
<td>163</td>
</tr>
<tr>
<td>Spirituality as a Source</td>
<td>164</td>
</tr>
<tr>
<td>Personality as a Source</td>
<td>170</td>
</tr>
<tr>
<td>Rooted in Previous Life Experiences</td>
<td>173</td>
</tr>
<tr>
<td>Rooted in Previous Job Experiences</td>
<td>177</td>
</tr>
</tbody>
</table>

Section II. Accessing Intuition

<table>
<thead>
<tr>
<th>Patient Variables that Affect Intuitiveness</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Self-Trust</td>
<td>184</td>
</tr>
<tr>
<td>Trusting Appropriate Patients and Professionals</td>
<td>188</td>
</tr>
<tr>
<td>Repositioning Oneself in Time and Space to Connect with Patients</td>
<td>191</td>
</tr>
<tr>
<td>Observing</td>
<td>191</td>
</tr>
<tr>
<td>Listening</td>
<td>193</td>
</tr>
<tr>
<td>Touching</td>
<td>195</td>
</tr>
</tbody>
</table>

Patient Variables that Affect Intuitiveness: 198
| Section III. Outcomes of Intuition in Practice | 203 |
| Guiding patient decision making ~ More than just the obvious | 203 |
| Holistic patient care (Body, Mind and Spirit) | 210 |
| Navigating Among the Professional Relationships | 216 |
| Dealing with power relations among medical and nursing professionals | 216 |
| Getting a multidisciplinary team involved | 223 |
| Creatively Dealing with Limited Resources | 226 |

| Section IV. The Culture of Nursing Education and the Nursing Profession | 232 |
| The Continuing Reification of the Medical Model | 232 |
| Getting Mixed Messages | 236 |
| Dealing with and Unlearning Fear Associated with Nonrational Ways of Knowing | 238 |
| Finding a Balance among Intuition, Science and Other Ways of Knowing | 242 |
| Wanting and Appreciating Stories | 242 |
| Slowly changing the profession | 249 |

| Summary | 252 |

| Chapter 6 DISCUSSION, CONCLUSIONS, AND IMPLICATIONS OF FINDINGS | 254 |
| Discussion of the Findings | 256 |
| Unique Features of the Participants | 256 |
| Novices Use of Intuition as a Way of Knowing | 259 |
| Revisiting “Women’s Ways of Knowing”: Intuition as an Extension of Connected Knowing | 262 |
| Being Relaxed in a Supportive Environment | 269 |
| Revisiting Cognitive Learning Theory: Moving Beyond Positivism to Integrative Ways of Knowing | 272 |

| Implications for Theory and Practice | 276 |
| Nursing Theory and Practice | 276 |
| Adult Nursing Education | 279 |

| Recommendations for Future Research | 284 |
| Summary and Conclusions | 287 |
| Closing Thoughts | 290 |

| REFERENCES | 292 |
Appendix A  Interview Guide.................................................................................... 325
Appendix B  Hammond Cognitive Continuum Framework ................................. 326
Appendix C  Miller Intuitiveness Instrument ....................................................... 327
Appendix D  Historical Overview of Intuition....................................................... 332
Appendix E  Consent Form.................................................................................... 339
<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Agyakwa 4 Models of Intuitive Knowing</td>
<td>39</td>
</tr>
<tr>
<td>2.2</td>
<td>Definitions of Intuition</td>
<td>66</td>
</tr>
<tr>
<td>2.3</td>
<td>Nursing Research That Identifies Intuition in Novice Practice</td>
<td>103</td>
</tr>
<tr>
<td>4.1</td>
<td>Participants</td>
<td>132</td>
</tr>
<tr>
<td>5.1</td>
<td>Participants Definitions</td>
<td>165</td>
</tr>
</tbody>
</table>
LIST OF ILLUSTRATIONS

Figure 1  Nursing Gestalt................................................................. 341
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DEDICATION

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CHAPTER 1

INTRODUCTION AND PURPOSE

A 44-year-old man came to the hospital after being involved in a motorcycle accident in which he was thrown off of his bike into the guardrail and slid approximately 40 feet. This occurred as he had attempted to avoid hitting the car in front of him that had come to a complete stop. I was surprised that he was alert and oriented on arrival to the emergency department and was able to recall the events of the accident because when the accident occurred he was not wearing a helmet. When he arrived he had stable vital signs, a normal Glasgow Coma Score (GCS) (neurological assessment), and a normal Revised Trauma Score (RTS) (scoring tool used to evaluate physiologic parameters in trauma patients). Despite these normal findings, I felt apprehensive and uncomfortable and could not understand why. I had taken care of many trauma patients before who were much more unstable than this man, yet for some reason this situation felt different. I kept second-guessing my assessment and wondering why I continued to feel that something is wrong. I looked around the room at my colleagues; no one else seemed to be concerned, as the trauma resuscitation efforts were progressing just like it would for any patient.

Although I had just completed an assessment ten minutes earlier with benign results, I felt I needed to go back in the room and perform a second complete assessment. I LISTENED to my inner feelings that something was just not right with this patient. This time I noticed his heart rate was faster than it was previously and he was developing a bruise over his anterior chest wall. I looked up at the heart monitor and saw that the
electrocardiogram (EKG) pattern had become flattened. Putting all this together, I immediately alerted the trauma surgeon as well as the emergency room physician and together we rapidly prepared the patient for a pericardiocentesis, a procedure necessary to decompress the pressure that was developing around his heart. The accident had caused a blood vessel to tear and consequently he was developing a pericardial tamponade secondary to bleeding.

A second scenario once again occurred in the trauma resuscitation area. This time a 28-year-old female was to arrive in approximately ten minutes. She had been involved in a motor vehicle accident. The mechanism of injury as well as the report from the prehospital team led me as well as the rest of the trauma team awaiting her arrival to believe that she was NOT going to be badly injured. Her vital signs were stable; she was breathing on her own, and the GCS and the RTS were within the normal range. However, when she rolled into the trauma bay, I took one look at her, noticed her grayish skin color, and facial grimacing, and suddenly realized things were more critical than the assessment and numbers had portrayed.

As I reflected back on these incidents, I recalled that these types of situations had happened many times in my twenty years of practice as a registered nurse. The scales and scores used to initially assess trauma patients are helpful, yet they do not take into consideration the health care practitioner’s “gut feeling” or intuition. Had intuitive insight been included in the initial patient assessment, the patient would have been scored much differently and consequently would have been treated differently.

During the situations described above, and many others that were similar, I remembered the words of my grandmother and mother. When I was a little girl, I
cherished the time I spent with my grandmother. When I needed her advice, she would listen attentively yet always seemed to give me the same accurate words of wisdom, “listen to your ‘inner voice’ for guidance and direction.” My mother, along the same lines would frequently tell me, “if something doesn’t feel right don’t do it!” I listened to them, and over the years, frequently reflected back on the advice that they had lovingly offered. But at the same time, it wasn’t until these instances that I UNDERSTOOD what it was that they were telling me.

During the above instances, while I was caring for these trauma patients, I listened to that ‘feeling’ and ‘inner voice’ that was telling me something was not right. This ‘inner voice,’ suddenly and unexpectedly, afforded me a holistic perception of the situation. I was then able to rapidly prepare for interventions that prevented possible deleterious patient situations. At the same time, I realized that neither in my undergraduate nursing education nor in my graduate nursing studies, had I ever been educated about the value of intuition and of listening to my inner feelings. Intuition, something so very basic, yet, something so powerful that it saved both of these patients’ lives.

Background of the Problem

Attempting to make sense of this and figure out why this important way of knowing was neglected in education, I looked at the bigger picture. I realized that our educational systems reflect the views held by our Western culture and society. In this culture rationalism and positivism are valued and consequently “our educational institutions give little attention to the development of intuitive understanding” (Bruner, 1960, p. 56). Our culture is replete with sayings such as “look before you leap” and
“think before you act” which focus purely on thinking and suggests that one’s ‘inner feelings’ or intuition tends to be flawed (Lieberman, 2000).

In the field of adult education, intuitive learning and knowing is not a new reality. While philosophers such as Plato and Aristotle led many educators to believe that human beings are very rational and logical, educators now realize there is more to learning than pure rationality and linear ways of thinking and knowing. As far back as 1927, Whitehead posited that the sole reliance on logic alone was insufficient. Rew and Barrow (1987) as well as others asserted that intuition is too powerful and too valuable to ignore (Agor, 1984; Atkinson & Claxton, 2000; Hogarth, 2001; Rew, 1987). Yet despite these assertions, intuition has continued to be known as a “neglected source of knowledge” (Rew & Barrow, 1987, p. 49) and consequently has been given little attention in mainstream academic adult education.

The recognition that there are several different techniques to process information, that have been ignored and silenced in the traditional obsession with objective knowledge and positivism is extremely important (Dirkx, 2001; Donald, 2002; Furlong, 2000). Knowing is multifaceted and encompasses intuitive knowing (Benner & Tanner, 1987; Miller & Rew, 1989; Rew, 1990, 2000, 2002), emotional knowing (Ferro, 1993; Gardner, 1983, 1999; Goleman, 1995; Ledoux, 1996; Pert, 1997), tacit knowing (Polanyi, 1958; 1964), subconscious knowing (Polanyi, 1967), unconscious knowing (Taylor, 1997, 2001) and spiritual knowing (Tisdell, 2003). Gradually during the last several decades these terms have slowly become part of the discourse of adult education.

Educators in many fields, in an attempt to prepare graduates for the complex world of practice are beginning to “uncover the ways in which explicit knowledge and
implicit ‘know-how,’ reason and intuition, are braided together in professional contexts” (Atkinson & Claxton, 2000, p. 3). Adult educators now recognize that intuitive knowing, as well as the other ways of knowing mentioned above are important components of learning and practice, decision-making and problem solving (Apostol, 1991; Cooper, 1994; Epeneter, 1998; John, 1992; McMahon, 1999; Miller, 1993, 1995; Mott, 1994; Ruth-Sahd, 1993, 2001, 2003; Wall, 1998; Watts, 1997). Despite this recognition however, in the field of adult education, very little research has been published or presented at conferences pertaining to intuitive ways of knowing.

Nursing and nursing education is a specific area of adult education practice. In the field of nursing, it is recognized that in practice nurses use many different sources of knowledge to gain a holistic perspective of their patient situation, guide their decision-making and inform patient care (Benner, 1984; Benner & Tanner, 1987; Rew, 1991, 2000, 2002). The Nursing Gestalt Model proposed by Pyles and Stern (1983) is instrumental in providing a holistic perspective to nursing care. See Figure 1. This model identifies that the holistic practice of nursing involves a synergy of logic and intuition and involves conceptual and sensory acts. Research has been conducted assessing the use of intuition by nursing managers (Agor, 1985, 1986, 1989; Campbell, 2000; Davidhizar, 1991), instructors (Agyakwa, 1988; Epeneter, 1998), leaders (Burton, 1999) and expert practitioners (Benner & Tanner, 1987; Carper, 1978), advanced nurse practitioners (Kosowski & Roberts, 2003) and nursing students (Brooks & Thomas, 1997; Eyres & Loustau, 1992; McCormack, 1993; Smith, 2003). While these studies add to our understanding of intuition in practice, they only answer if the practitioner uses intuition,
they focus on expert nurses and do not identify what intuition actually means to the nurses, how they define intuition and operationalize it in their practice.

At this point, it is necessary to clarify that rationality is not being cast in a negative way, as I recognize the value of rationality, and the fact that many developments have occurred because of this way of knowing; however, when rationality is used as the only way of knowing, this is very limiting and unidimensional. I would argue that intuitive ways of knowing when braided together with rationality provides a more holistic and multidimensional way of knowing.

When defining intuition, one needs to consider the etymological definition of a word. The word intuition comes from the Latin word “inteuri” which means to look at, view, or look into. The Oxford English Dictionary (1989), defines intuition as:

1) The action of looking upon or into; contemplation; introspection; a sight or view, 2) The action of mentally looking at; consideration; perception; recognition; mental view, as a motive of action; ulterior view; regard, respect, reference, 3) The spiritual perception or immediate knowledge, ascribed to angelic and spiritual beings, with whom vision and knowledge are identical. 4) The immediate apprehension of an object by the mind without the intervention of any reasoning process (p. 30).

The definition of intuition that is used in this study is based on the work of Bastick (1982), Carper (1978) and Lieberman (2000). Bastick proposes that intuition is a universal characteristic of human thought. Carper based on the writings of Dewey (1958) and Polanyi (1964, 1967), sought to identify the patterns of knowing on which nurses rely. She identified four patterns of knowing as a) empirics, the science of nursing; b)
esthetics, the art of nursing; c) the component of a personal knowledge in nursing; and d) ethics, the component of moral knowledge in nursing. Carper suggests that intuition is the synthesis of personal and experiential modes of knowing with empirical, esthetic and ethical ways of knowing. Carper posited that, “understanding the four fundamental patterns of knowing makes possible an increased awareness of the complexity and the diversity of nursing knowledge” (p. 21).

Lieberman, a social psychologist employing a social cognitive neuroscience approach (2000) states that “intuition is a phenomenological and behavioral correlate of knowledge obtained through implicit learning” (p.110) and defines intuition as the “subjective experience of a mostly nonconscious process that is fast, a-logical, and inaccessible to consciousness” (p.111). Lieberman suggests that one of the ways intuition may be made evident is through nonverbal communication or nonverbal decoding.

Therefore, intuition in this study is defined as a humanistic way to process information which leads to ways of knowing that are perceived through emotion, senses, nurse-patient relationship, and/or spiritual connections. Intuition may be used collaboratively with rationality, but may also happen outside of the rational domain. Intuition allows one to identify what is possibly going to happen in the future, see missing pieces of information, and/or detect patterns of information that allows one to make quick decisions or take action.

The diversity of intuitive knowing is evidenced in the nursing literature by the fact that it has been linked with empathy (Reynolds, 1999), emotional knowing (Bastick, 1982), experience (Benner, 1982; 1984; Benner & Tanner, 1987), sudden increased

Intuition differs from neurotic forms of misknowledge in that with intuition there is a high degree of certainty, a holistic perception that is immediate and occurs independent of linear reasoning. Intuition is rooted in a sound knowledge base, and provides a ‘practical wisdom’ (Smith, 1996; Vaughan, 1979) which may later be verified through linear, rational analysis and application of theoretical knowledge (Rew, 2000).

Purpose of the Research

There is a paucity of research regarding the use of intuition by novice practitioners (Eyers, Loustau and Ersek, 1992; King & Clark, 1997) in both the fields of adult education as well as in nursing. In the past twenty years there have been three qualitative and two quantitative studies on intuition in novice nurses. Handy (1999) in an unpublished quantitative doctoral study using 177 registered nurses across all skill level wanted to identify if the use of intuition and autonomy varied depending upon the skill level of the practitioners. Kirwin (1999), in completing her Master’s thesis did a qualitative study to explore the role of intuition in the clinical decision making of newly qualified nurses. A qualitative study in Canada conducted by Logan and Boss (1993) utilized nurses from each of the novice to expert stages of skill acquisition according to Dreyfus and Dreyfus. A qualitative study by McMurray (1992) in Australia, looked at 37-community health nurses (ten novices and 27 experts). A quantitative study by Lauri,
Salantera, Callister, Harrisson, Kapeli & MacLeod (1998) was conducted with 314 nurses from different phases of their practice from novice to experts, from five countries including, Canada, Finland, Northern Ireland, Switzerland and the United States. Largely, the findings from these studies revealed that intuition is used during all levels of skill acquisition and is affected by a number of factors such as educational and personal experience.

Based on the fact that these studies identified that intuition is used in all levels of skill acquisition and only one study addressed the use of intuition solely by the novice, this qualitative, phenomenological study addressed the gap in the literature by assessing the meaning of intuition to novice registered nurses. Additionally, it identifies how novice registered nurses draw on intuition to guide their practice and decision-making, and to identify the channels, correlates, barriers and outcomes of intuition. This study examined how novice registered nurses draw on intuition in their daily lives and in their practice. Additionally, this study identified the degree to which the novice registered nurse was exposed to intuition in their nursing education and what suggestions they have for continuing professional education that may impact the use of intuition.

Guiding Research Questions

Given this information, the research questions that guided this study were:

1) What is the meaning of intuitive knowing to novice registered nurses?
2) How does the use of intuition impact the novice nurse’s practice?
3) What are the implications for nursing education practice?
Conceptual / Theoretical Framework

“If you bring forth what is inside you, what you bring forth will save you. If you do not bring forth what is inside you, what you do not bring forth will destroy you.”
THE GOSPEL OF THOMAS

This quote exemplifies that we all have inner wisdom and knowledge. If this source of knowledge is not brought forth, it will lie dormant and as Bruner (1977) emphasized, “our failure to recognize the important power of intuition results in our intuition going underground to become part of a secret intellectual life” (p. 91).

While the theoretical framework will be discussed in greater detail in Chapter 2, the theories that helped to guide this inquiry, either directly or implicitly, came from several sources. These sources are Cognitive Learning Theory (Bruner, 1960), intuition as way to process information (Cohen, 1969; Lieberman, 2000), women’s ways of knowing (Belenky, Clinchy, Goldberger and Tarule, 1986), the Model of Skill Acquisition by Dreyfus and Dreyfus (1986) and the Nursing Gestalt Model proposed by Pyles and Stern (1983).

Cognitive learning theory informs this study as it relates to how information is gained from the world, how such information is represented and transformed as knowledge, how the information is stored and how that information is then used to direct our attention and behavior (Bruner, 1960). Both Cohen (1969) and Lieberman (2000) made the connection between cognitive learning theory and intuition as way to process information.

Because the field of nursing continues to be largely women (97% according to Steefel, 2003), this study will also be informed by Women’s Ways of Knowing (WWK)
(Belenky, Clinchy, Goldberger & Tarule’s, 1986). Although the participants included here will be from a diverse population, and not exclusively female, this perspective will allow me to be open to the unique voices and perspectives of women that will participate in this study.

The Dreyfus and Dreyfus model of skill acquisition (1986) was used solely to inform the definition of novice registered nurse. Dreyfus and Dreyfus suggests that in the acquisition of a skill a learner goes through five levels of proficiency; novice, advanced beginner, competent, proficient, and expert. Benner (1984) has previously used this model in nursing. Benner asserts that it is only the expert practitioner with years of experience who has the ability to use intuitive knowing. Despite Benner’s beliefs that intuition is only privy to the expert practitioner, she has legitimized and validated the use of intuition in nursing practice. Others such as Rew (1986, 1990, 1991) and Miller and Rew (1989) affirmed the significance of intuition in all levels nursing proficiency and not just the expert level. They believe that intuition is a valuable cognitive skill, which may be employed by nurses with various levels of proficiency and in diverse clinical settings.

The last theory that informed this study is that of the nursing Gestalt Model by Pyles and Stern (1983). This model provides the holistic, multidimensional notion of nursing knowledge and validates that nurses do use intuition in practice. Furthermore, this model suggests that novice nurses can learn intuition from more experienced nurses who act as mentors.

Overview of Research Methods and Design

The purpose of a qualitative design is to capture the perspectives of the participants (McMillan & Schumacher, 1997). Patton (2002) states it “permits one to
understand the world as seen by the respondents” (p. 21). In an attempt to discover the meaning that novice registered nurses give to intuition, a qualitative design was very appropriate in order to identify their own individual meanings and stories.

Phenomenology, concerned with understanding a phenomenon from the perspective of those who have experienced it, was the research approach used in this study and will be discussed in greater depth in Chapter 3. Phenomenology exists both as a philosophy and a qualitative research method. As a philosophy, phenomenology accepts everyday experiences as evidence and seeks to answer the question, “What is the meaning, structure, and essence of the lived experience of this phenomenon for this person or group of people?” (Parse, 2001, p. 78).

Phenomenology as a research methodology is the investigation of consciousness in the world. Phenomenologists investigate subjective phenomena with the belief that essential truths about reality are grounded in people’s lived experiences (Patton, 2002). Phenomenologists seek to gain rich, in-depth understanding of a human phenomenon as experienced by the people (Gadamer, 1990; Heidegger, 1962, 1972; Husserl, 1931, 1970, 1973; Moustakas, 1994; van Manen, 1990). According to Lindeman, (1961), the “resources of highest value in adult education is the learner’s experience which then becomes the adult learner’s living textbook…already there waiting to be appropriated” (p. 6-7). Phenomenology is “not introspective but retrospective” (Patton, 2002, p. 104) and involves the reflection on the experience that is already passed or lived through. In this study, that experience is intuition. Since the purpose of this study is to identify a richer, deeper understanding of the phenomenon of intuition to the novice registered nurse, a phenomenological inquiry is most appropriate.
As it is believed that all human experiences are by definition interpretive, this study is most closely aligned with Heidegger’s interpretivist view of phenomenology (1962, 1972). Based on this, assumptions were not bracketed or suspended, as Husserl (1931, 1970, 1973) would recommend. Instead of “bracketing” assumptions, they were shared with the interviewees throughout the research process as a way to recognize and minimize researcher bias when appropriate.

The purposeful sample for this study was derived from a group of novice registered nurses who scored above the mean on the Miller Intuitiveness Instrument-MII (Miller, 1990) and agreed to participate in a qualitative study. These nurses were part of a stratified random sample that was involved in a previous quantitative study I did in collaboration with Dr. Hendy in the spring of 2003. The MII measures self-perception of intuitiveness. In addition to the MII score, the participants in this study were excellent student nurses as evidenced by their graduating grade point average being greater than 3.0, had less than 1 year of clinical experience as a registered nurse and were between the ages of 21 and 27.

The primary method of data collection for this study was through two in-depth, face-to-face individual interviews. The second interview was a follow up interview. The purpose of interviews as stated by Patton (2002) allows “us to enter into the other person’s perspective. Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit” (p. 341). The use of an interview guide using open-ended, semi-structured questions was utilized in order to focus on key areas, yet allow for flexibility. The interview guide for this study is in Appendix A.
After receiving permission from the participants, all interviews were audio recorded assuring that the identities of the interviewees were protected. These tapes were then transcribed. Recognizing that some intuitive insights may not be able to be articulated verbally, the interviewees were welcome to bring drawings, pictures, photographs or any other aids to assist in describing their meaning of intuition. Using an inductive analysis and a constant comparative method of data analysis, key themes that emerged from the interviews were identified (Patton, 2002). My advisor was kept informed of the findings as the study unfolded and had access to all data, tapes, tools and transcripts for feedback. This also helped to avoid potential investigator bias.

Significance of the Study

Through understanding the meaning of intuition to novice registered nurses and its efficacy in practice, the nursing profession will gain greater insight as to whether intuitive ways of knowing are significant in informing the practice and decision making of the novice nurse. Furthermore, nursing educators will gain greater insight as to how to educate nurses. The information obtained from this study helped to: a) clarify the meaning of intuition in novice nursing practice; b) broaden the scope of Cognitive Learning Theory by proposing that intuition is an information processing technique that informs the decision-making of novice registered nurses; c) deepen the understanding of how intuition is used, by what channels, and what experiences influence intuition; and d) offer insights that inform nursing education, guide curriculum development, enhance clinical instruction and better prepare the graduate nurse for the complex world of practice. Ultimately, it is hoped that this information will enhance the nursing care of patients and improve patient outcomes.
In 1974 in the field of education, Argyris and Schön, posited that professional competence might mean increasing our “capacity to learn how to learn” (p. 157). Similarly in 1977, Bruner stated that we know very little about our intuitive abilities, the nature of intuition, or other factors that influence it. Educators concerned with the gap between what professionals are taught and what they need as a foundation to practice more effectively have begun to question curriculum content (Schön, 1983, 1987; Usher, 1989). This study verified that novice registered nurses use and rely on intuition in the novice phase of their professional practice to inform their clinical decision-making. Therefore, nursing educators will realize the importance of including intuition in their curriculum.

A significant point this study made is to clarify the value of intuition to the system of higher education, which is entrenched in rationality and positivism. Presently, our system of higher education, embraces analytic thinking, inductive reasoning, and objective assessment (Dirkx, 2001). Higher education must create space (Sheared & Sissel, 2001) for other ways of knowing and recognize how exclusionary hegemonic white dominant patriarchal culture, known as gatekeepers within the field, have either consciously or unconsciously limited the accepted form of knowledge to be purely scientific and rational. Therefore, this research helps to authenticate the use of intuition in adult nursing education, and thereby allow educators as well as practitioners to see that intuition is accepted as a legitimate way to process information and a legitimate way of knowing. If intuition is fostered and mentored in the classroom, the novice nurse will be more likely to draw on intuition as a source of knowledge in practice.
Fitzpatrick (2000) states that “the style of teaching is dependent on the epistemological stance of the educator” (p. 3). If intuition is to be nurtured in the classroom, adult educators must begin by recognizing the significance of intuition in their own lives and practice and introspectively reflect on and identify what their beliefs are regarding intuition. Bruner adds, “improving the use of intuitive thinking by teachers is as much a problem as improving its use by students” (1977, p. 56). Bruner added that the use of intuition would be more likely if educators see intuition being accepted and used by their peers.

The increased cultural diversity seen in our world is also seen in our classrooms and in the patients that novice registered nurses care for today. This requires an understanding from many different worldviews and perspectives that have different ways of assessing health, disease, and wellness. Adult educators advocating multicultural education must recognize and embrace that not only are our students diverse in areas of race, class, gender, and sexuality, but they are also diverse in their ways of knowing and meaning-making. Intuition is valued differently among various cultural groups (Agor, 1989; Blanchard, 1993; Nuby & Oxford, 1995). Therefore, truly diverse multicultural education must consider alternate ways of knowing such as intuition (Ruth-Sahd, 2003).

Not only are our nursing classrooms becoming more culturally diverse, but they are also becoming more diverse as a result of people choosing nursing as a second career. Our classrooms are filled with “nontraditional students” who bring many life experiences as well as previous job experiences with them. These rich experiences inform their information processing techniques as well as their ways of knowing.
In nursing, many studies have validated that intuition is widely used by expert practitioners and have negated the use of intuition by the novice nurse stating that they do not have the ability to use intuition (Benner, 1984). This has interested me because, as an educator, I have witnessed many nursing students and beginning novice practitioners use intuition. Rew (1988a) as well as others (Bastick, 1982; Miller, 1993) has suggested that indeed novice nurses do use intuition. Furthermore other studies have found intuition to be used covertly by the novice nurse (King & Clark, 1997; Lauri & Salantera et al., 1998).

Holistic nursing practice draws on several forms of knowledge in an effort to enhance patient care and prevent deleterious patient outcomes that may have occurred if other ways of knowing such as intuition would not have been utilized. Nurses who develop an intuitive sense for what is unspoken, alluded to, disguised, unrecognized or suppressed by the patient are able to interpret all the cues and information that is meaningful to a particular patient (Philipp, Philipp, & Thorne, 1999; Rew, 2002).

This intuitive sense involves a heightened awareness from the nurse, which allows for the detection of subtle cues from the patient. Patient cues are multifaceted and may include changes in behavior and attitudes, changes in mood, posture or speech, odors, avoidance of subjects, flights or association of ideas, and nonverbal communication among others (Chen & Haviland-Jones, 2000).

This study is of utmost importance to me because of the stories that I have shared earlier and the positive patient outcomes I have witnessed as a result of relying on intuition. I have witnessed this not only in my own practice but in the education of
nursing students that I have taught over the years. It is important to utilize whatever tool is necessary to help a patient improve. Riley (2000) quotes Abraham Maslow as saying,

Let people realize clearly that every time they threaten someone or humiliate, or unnecessarily hurt or dominate or reject another human being, they become forces for the creation of psychopathology, even if theses are small forces. Let them recognize that every person who is kind, helpful, decent, psychologically democratic, affectionate, and warm, is a psychotherapeutic force, even though a small one. (p. 25)

These beliefs are not only true for me as a person but also carry over into my practice as a caring, empathetic, intuitive, and knowledgeable nurse. Why should one be limited to using only cognitive rational processes to assess patients and make decisions? The complexity of nursing, demands a full artillery of not only rational, cognitive ways of knowing but also nonrational, intuitive ways of knowing that foster holistic care. If I were to put myself in my patients’ position, I would want a nurse caring for me that not only possessed a sound knowledge base, but also one that looks at all of the dimensions of my care.

As an educator, it is important for me to stress to my students how intuition can work in conjunction with cognitive, scientific processes to strengthen information-processing, guide decision-making and enhance patient care. I strive to legitimize intuition in my classroom by promoting multicultural education that accepts a variety of ways of knowing, by encouraging students to recognize the knowledge embedded in themselves, by allowing time for the students, in a reflective manner, to take the time to PAUSE and listen to that inner voice, by acting as a role model, allowing my students to
see and hear how intuition has informed my life and professional practice, and lastly, by evidencing in clinical situations how intuition may enhance patient care, providing a holistic perspective. In conclusion, the words of Henry Wadsworth Longfellow seem appropriate, “Give what you have. To someone, it may be better than you dare to think.” These words evidence that intuition may be very helpful, if not life saving.

Assumptions and Limitations of the Study

All research has assumptions and limitations. The following assumptions embedded in this research are as follows:

First, intuition is an innate human characteristic which novice registered nurses have the ability to use. However through the process of education, student nurses learn how NOT to be intuitive. On the other hand, student nurses learn how to be intuitive from role models they are exposed to during their educational process. If intuition has been encouraged and modeled, by influential role models, the novice nurse will use intuition and consequently, it will become part of their own beliefs and value systems.

Second, novice nurses experience intuition and are able to recognize intuitive knowing in their practice as a valuable nursing skill. It is further assumed that most nurses want to be good nurses and are willing to use intuition if it will positively impact patient care and improve outcomes.

Third, the experience of intuition is influenced by previous life experiences and the subculture of nursing education. Fourth, intuition may be fostered and taught in the higher educational system.
Fifth, many of the channels by which intuition are revealed to the novice registered nurse can be articulated verbally or displayed visually using photo elicitation or drawings to the researcher.

The following limitations of this study have been identified. First, this research used semi-structured, in-depth interviews using a small purposeful sample. While the nature of qualitative research limits the generalizability, rich descriptions of the meaning of intuition may not be obtained using any other research approach. Therefore, the novice registered nurses stories are not generalizable to all novice registered nurses. However, when using the phenomenological approach in qualitative research it is not expected to gain generalizable data; furthermore it is up to the reader to determine if the findings can be applied to similar situations.

A second limitation, is the fact that I am very open to intuitive ways of knowing. This is likely to be evident to the participants and could potentially affect their responses. In qualitative research the researcher is the primary instrument. Therefore, according to Merriam (2002), I needed to assess my own attitudes, communication skills, and sensitivity to the data throughout the study.

Third, some intuitive messages are difficult or unable to be articulated verbally. Taking this into consideration, the interviewees will be permitted to bring pictures, drawings or any other visual prompt that will enhance the description of their intuition. Yet despite this, some aspects of intuition are still not able to communicated. A final limitation is the restriction of the geographic location that was convenient to the researcher.
Despite these limitations, rigorous methods were undertaken to enhance the dependability. The study makes important contributions to the field of adult education and nursing education by validating that novice registered nurses use intuitive ways of knowing in their practice. The qualitative approach provides a richness of data that allows educators to recognize that to better prepare graduates for the complex workforce, they must include both rational and nonrational ways of knowing in their curriculum.

Definition of Terms

The following definitions of terms in this study are important to identify:

**Intuition** is a humanistic way to process information. It leads to knowing that is perceived through emotions, senses, nurse-patient relationship, spirituality, past experiences, knowledge, and perceptions. Intuition may be used collaboratively with rationality, but may also occur outside of the rational domain. Intuition allows one to identify what is going to happen in the future, see missing pieces of information, and/or detect patterns of information that allows one to make quick decisions or take action.

**Novice** is classified according to the Dreyfus and Dreyfus model of skill acquisition (1986). Dreyfus, a mathematician and system analyst, and Dreyfus, a philosopher, posit that a learner goes through five levels of proficiency: novice, advanced beginner, competent, proficient and expert. Dreyfus and Dreyfus identify that there are different aspects of skill performance in these levels of proficiency.

**Novice Intuitive Registered Nurse** is defined as having less than one year of experience as a nurse, a grade point average of 3.0 or greater at the time of graduation, graduate from a baccalaureate national league for nursing accredited program, successfully pass the national council licensure examination (NCLEX), and a score
above the mean range on the Miller Intuitiveness Instrument, which identifies self-perception of intuitiveness.

**Patient variables** are referred to as ethnicity, socioeconomic status (Beech, Scianci, Naumann, Kovach, Pugh, & Balzora, 2001) smiles, breathlessness, coloring, smell (Chen & Haviland-Jones, 2000; Rew, 1986), first names (Mehrabian, 2001) and even gender. Other variables such as anger (Dimberg, Thunberg, & Elmehed, 2000), patients laughter (Bachorowski & Owren, 2001) and nonverbal communication such as facial expressions, can provide valuable cues to the nurse that may trigger intuition (Archinard, 2000).

**Provider variables** are characteristics that the nurse brings to the nurse-patient relationship which may negatively or positively affect intuition. Nurses who are more critical, rigid self focused, rushed, tired, distracted, and less involved with their patients were found to be less understanding and thereby less intuitive (Riley, 2000). On the other hand, nurses who are empathetic, caring and have time to spend with the patients are found to be more intuitive (Reynolds, 1999).

**Patient-provider relationship** is the interaction between a nurse and a patient. Values, beliefs, relational patterns, as well as the expectations that each person brings with them impact this relationship. This relationship must be equal to allow for the exchange of conversation between the patient and the professional and must be based on mutual trust (Arnason, 2000). Nursing actions may be bridges or barriers to good nurse patient interaction. Bridges to enhance communication are caring, trust, empathy, mutuality, confidentiality whereas barriers are anxiety, stereotyping and space violation (Boggs in Arnold and Boggs, 1999).
Organization of the Study

This first chapter outlined in brief the background of this study as well as the basic premises of this study. The purpose statement, theoretical perspective, methodology, and research questions were articulated. Assumptions and limitations were also provided, as well as definitions of key terms. Chapter 2 provides a summary and analysis of the literature. Chapter 3 contributes a detailed explanation of and rationale for the methodology and procedures. Chapter 4 introduces the participants and provides biographical sketches of each one. Chapter 5 presents relevant research results. The final chapter, chapter 6 displays the discussion, conclusions, implications of the findings for the fields of adult education and nursing practice and finally proposes recommendations for future research.
CHAPTER 2

LITERATURE REVIEW

The purpose of a literature review according to Burns and Grove (2001) is to “gain a current knowledge base for the research problem” (p. 128). The purpose of this study is to identify the meaning of the phenomenon of intuition to novice registered nurses. This literature review will inform this study by providing a better understanding of intuition, examine ways of knowing, and identify what exists in the theoretical and data-based literature regarding intuition in novice practice. Four main sections of the literature related to this study will be explored: Section I: The Theoretical Framework: Cognitive Learning Theory, Section II: The Concept of Intuition, Section III: The Use of Intuition in Various Related Disciplines, and lastly, Section IV: The Concept of Novice.

The Theoretical Framework: Cognitive Learning Theory

This section will discuss the theoretical framework of this study. The following theories guided this study theoretically: Cognitive Learning Theory (Bruner, 1966), intuition as a way to process information (Cohen, 1969; Lieberman, 2000), the Nursing Gestalt Model proposed by Pyles and Stern (1983), Women’s Ways of Knowing (Belenky, Clinchy, Goldberger & Tarule, 1986), the Model of Skill Acquisition (Dreyfus & Dreyfus, 1986). This section will also present theoretical models of intuition. Ways in which intuition has been legitimized, as a way of knowing both in our culture and in the system of higher education will highlighted. Resistance to intuition as a legitimate way of knowing both at the institutional level, as well as on a personal level will be
investigated. Lastly, this section will identify existing quantitative tools to measure intuition.

**Cognitive Learning Theory and Information Processing**

Cognitive learning theory informs this study as it relates to how information is gained from the world, how such information is represented and transformed as knowledge, how the information is stored and how that information is then used to direct our attention and behavior. Information processing is concerned with the receiving, encoding, storage and retrieval of information (Bruner, 1966; Flannery, 1993).

Information is sensed, perceived, and attended to and then it is stored. Once the information is stored, it may be stored for either a brief or extended period of time dependent upon the experiences following the encoding. The retrieval of information occurs then when the stored information is reactivated based on present experiences, stimuli or tasks. Cognitivists, believe that, the human mind is not simply a passive exchange-terminal where the stimuli arrive and the appropriate response leaves. Rather, the thinking person interprets sensations and gives meaning to the event that impinges upon his consciousness.

The cognitive rationalist seeks to acquire knowledge and truth through the power of reason, or analytic thought. This mind set has become the dominant discourse in our Western culture and also in our systems of higher education. Consequently individuals who have the ability of the mind to think with deliberate and structured rationality, apply principles of logic and analytical reasoning earn respect and positions of power within the community (Davis & Davis, 2003).
For thousands of years, cognitive theorists have been attempting to better understand the nature of knowledge and truth. Consequently, cognitive leaning theory and the interpretations of how individuals learn and make meaning has evolved over the years. Plato more than two thousand years ago, described *a priori knowledge*, that he posited to be a very reliable technique for determining truth, knowledge and reality without involvement of the senses (Davis & Davis, 2003). During this time, ways of knowing that involved the senses were considered to be unreliable and too subjective.

Later, Aristotle, one of Plato’s students, described rationality according to what he called “Aristotelian logic.” This logic, according to Davis and Davis (2003), included empiricism, scientific observation, and inductive reasoning. This provides the foundation for the Western scientific method, even today.

In the seventeenth and early eighteenth centuries, French philosopher Rene Descartes continued to maintain his Cartesian theory that truth could only be revealed through rationality and the process of reason. Also during this time Spinoza, a Dutch philosopher, began to consider the role of emotions. Questions began to arise during this time regarding God and his divine interventions. During this Enlightenment period people were in search of happiness, justice, and knowledge and began to question traditional beliefs. Immanuel Kant, a German philosopher, posited that an individual’s experience contributes to his capacity to reason, to understand and to identify truths (Davis & Davis, 2003). In 1781, Kant wrote a *Critique of Pure Reason*, in which he stated, “Dare to Know! Have the courage to use your own intelligence!”

Progressing into the mid to late eighteenth century and the early nineteenth century, empiricists such as Locke and Hume dared to argue that truth and knowledge
arose from the senses and were the result of deductive reasoning. Many philosophers during this time believed that God, truth, and knowledge were all intertwined, while others continued to emphasize the traditional vestiges of scientific rationalism.

In the early nineteenth century, Gestalt psychology, based on the work of Kohler (1929), Koffka (1933), Wertheimer (1945), and later Lewin (1947), emphasizes the holistic nature of cognitive learning and proposes looking at the whole rather than its separate parts and at patterns rather than separate events. Gestalt, is a German word that means pattern or configuration. The gestalt or the “ah ha” occurs when the learning happens suddenly, and one feels she/he now has a true understanding of a previous mystery. Gestaltists believe that an individual comes to see the answer to a problem after pondering over it for some time and believe that the locus of control for the cognitive process of learning lies within the individual. When the solution comes to the individual it may come as a sudden insight (Ormrod, 1995). Gestaltists also believe that ‘We see things not as they are, but as we are’ (Claxton, 1997).

In the 1960’s, Piaget’s cognitive developmental work with children laid the foundation for the understanding of cognitive information processing in adults (Tennant, 1988). Researchers based their work on Piaget, and began to look at theories of adult cognitive development. Bruner, inspired by Piaget looked at the process of education (1966) and discussed cognitive and analytical thinking with the addition of intuitive knowing. Bruner defined intuition as “the intellectual technique of arriving at plausible but tentative formulations without going through the analytical steps by which such formulations would be found to be valid or invalid conclusion” (Bruner, 1960, p. 62). Bruner linked insights with intuition in his book, The Process of Education (1977) and
identified two types of intuition in mathematics. The first type is being able to make very
good guesses as to whether something is right or wrong, and or what is the best approach
to take when problem solving. He discussed a sense of “rightness,” as a feeling that one
has, but cannot articulate why. The second type of mathematical intuition provides the
answer to a problem without formal proof. Bruner described how experts in different
fields appear to “leap intuitively into a decision or to a solution to a problem” (1960, p.
62).

Bruner voiced concerns about the denigration of intuition in the classroom. He
urged his students to guess when the price of guessing is not too high. He recognized the
relationship between intuition and heuristic thinking and likewise made his students
aware of this relationship. Bruner (1966) stated that once environmental and experiential
factors are reorganized in a meaningful way, learning has taken place. Bruner (1977)
writes, “Intuition implies the act of grasping the meaning or significance or structure of a
problem without explicit reliance on the analytic apparatus of one’s craft” (p. 102).

Gestalt psychology influenced the work of Pyles and Stern (1983). Their
qualitative study entitled Discovering the Nursing Gestalt used a grounded theory
approach involving 28 experienced nurses. They noted that nurses link together basic
knowledge, past experiences, identifying cues presented by patients, and sensory clues
including ‘gut feeling’ to obtain a holistic view of the patient and consequently obtain a
nursing gestalt. See Figure 1 for the Nursing Gestalt Model. Gestalt psychologists’ key
contributions to cognitive learning theory are perception, insight, and meaning.

In the 1970’s and 80’s, other scholars and researchers in the fields of adult
education and psychology recognized the intricate ways in which intuition and intellect
balance and complement each other. Gardner (1975, 1983) posited that we employ multiple intelligences to process information, including furtive, non-empirical modes which often elude description. Goleman (1986) began to question the value of intelligence tests stating can not accurately measure emotion, and sought ways to accurately measure intelligence.

Belenky, Clinchy, Goldberger and Tarule (1986) also investigated women’s ways of processing information. Influenced by the work of Perry (1970, 1981) on the moral and cognitive development of male college students at Harvard (1970), Belenky et al. assessed 135 women’s ways of knowing. This work is essential to note in this study because presently, 97% of nurses are females (Steefel, 2003) and therefore it is relevant to consider the ways in which females learn and process information.

Using in-depth interviews Belenky et al. (1986) developed a descriptive scheme of five major epistemological knowing categories. The five knowing patterns that they discuss as used by the women in their study are silence, received knowing, subjective knowing, procedural knowing, and constructed knowing. Subjective knowing is associated with intuitive knowing because the truth is within oneself and derived from intuition and/or feelings. The women were able to move “from passivity to action, from self as static to self as becoming, from silence to a protesting inner voice and infallible gut” (p. 54). The women had the ability to articulate and listen to their own thoughts, their own personal, private, inner voice and experience as a source of knowledge and were able to move away from externally oriented knowledge. These women no longer adhered to the dualistic notion of truth and knowing, and right and wrong but instead were able to listen to their gut as a source of guidance. For all the women the shift into
subjectivism was an adaptive move in that it was accompanied by an increased experience if strength, optimism, and self-value.

While Belenky et al.’s women’s ways of knowing theory (1986) makes a significant contribution to cognitive learning theory, it is not without criticism. Some of these criticisms noted that their work was too linear and insensitive to situational and cultural determinants of knowing such as how knowledge and knowing, class, race, gender, and culture intersect and inform one another. Another criticism being that they were endorsing the superiority of antirational ways of thinking. In their most recent work (1996), they found that culture and personal experiences shape what and how people develop their distinctive ways of knowing. Additionally, they learned that the dominant culture may subvert ways of cognition that it does not value.

When applying Belenky et al.’s theory to nursing education it is important for nursing educators to recognize that women do not rely strictly on rationality, but rather they rely on different perspectives from which they view reality and draw conclusions about truth, knowledge and authority. In addition, a woman’s self concept is intertwined with her ways of knowing. Nursing, guided by the medical model for centuries, is now challenged to incorporate women’s ways of knowing into the standard traditional curriculum and pedagogical strategies as a means to enhance the education of nurses. Nursing can no longer focus on the ways of knowing accepted by the dominant medical culture.

In the 90’s, Eyers, Loustau and Ersek (1992) using the Women’s Ways of Knowing typology by Belenky, et al., (1986) conducted a phenomenological study to identify ways of knowing in 21 students in their first quarter of nursing school.
participants consisted of 16 women and 5 men. Four were self-declared minority students and three used English as their second language. The findings evidenced that every participant showed traces of multiple positions and none were found to be silent knowers. It was identified that many of the female nursing students were hesitant to use their voices. Younger women (age 22 or younger) used combinations of received and subjective knowing, where as the older women used subjective and procedural ways of knowing. This study was unsuccessful in using the typology to code the men’s data.

In 1994, Epstein in developing a cognitive-experiential self-theory of personality differentiates two systems which people employ to process information. The first system is the experiential, and the other is rational. Epstein states the experiential system is driven by emotion, intuition and automatic processing of information which allows the person to make generalizations through the use of prototypes, metaphors, scripts and narratives. In this system the role of preconscious processes and emotion are very important. On the other hand the rational system, is an abstract system that operates essentially from language.

Damasio (1994) added to cognitive learning theory, the role of emotions and feelings, contextual demands of the environment, and experience. He viewed intuition as a valid component of human cognition, decision-making, and learning. He stated that intuition provides the ‘glue’ that holds together our conscious intellect and our intelligent action.

Also in the 90’s, Hammond’s Cognitive Continuum Framework (1996) (Appendix B) was derived from theoretical and empirical evidence from a wide variety of disciplines and serves to reconcile the opposing extremes of thinking. After quantitatively
studying the direct comparisons of intuition and analytical cognition, Hammond posited that people process information in a variety of ways along a six mode continuum that goes from intuition (mode six) to analysis (mode one). Between these two extremes are various mixes in which one may use quasi-rationality or analytical cognition. Hammond further suggests that the type of cognition needed depends on the task at hand. In other words, someone could find analysis preferred to intuition on one task but intuition preferred to analysis on another. For example, people weigh different informational cues differently, it may be more helpful to look at numbers from monitoring devices for some patients, whereas for others it may be beneficial to intuitively assess informational cues. Within Hammond’s model, people use a mix, or a compromise of the cognitive and intuitive elements as well as a variety of informational cues when making decisions.

Moving forward, Hogarth (2001) proposes two fundamental kinds of knowledge that underlie human cognition: deliberate and tacit. The deliberate system is that aspect of conscious thought that analyzes, interprets and processes information and plans responses. Whereas the tacit system is nondeliberate, subconscious, rapid, efficient, and is constructed upon knowledge and experience. Intuition, he proposes is in the tacit kind of knowledge.

Taylor (2001) and Dirkx (2001) both adult educators, emphasize the holistic nature cognition and advocate for the recognition of emotions and unconscious ways of knowing. Taylor states that, “without emotions rationality cannot work” (p. 223). Dirkx suggests the power of feelings, emotions, and imaginations are essential to recognize in the teaching learning environment. Other adult educators such as Tisdell (2003) and English and Gillen (2000) encourage the attention to spirituality and culture in adult
education. Recognizing these truths, it is suggested that educators utilize humanistic teaching strategies and recognize how diverse ways of knowing such as intuition, may work in conjunction with rational, linear approaches to enhance holistic education and prepare graduates for the complex world of practice (Garcia & Ford, 2001; Garrison, 1995).

Cognitive Learning Theory and information processing, though continuing to emerge and define themselves are appropriate within the context of this study as intuition is thought to be an innate, humanistic way to process information that leads to knowing. Emotion, senses, nurse-patient relationship, and/or spiritual connections may mediate this process.

In summary, many adult educators are building on these theories that suggest intuition is a way to process information. This is evidenced by the recent books have been published noting the significance of intuition in education. These books validate the importance of intuition as a component of cognitive learning theory and suggest practical teaching strategies for educators to include intuition in their classrooms (Atkinson & Claxton, 2001; Davis-Floyd & Arvidson, 1997; Hayes & Flannery, 2000; Hogarth, 2001; Torff & Strenberg, 2001), and in organizations (Davis & Davis, 2003; Klein, 2003). This study hopes to advance the boundaries of cognitive learning theory by addressing the role of intuitive ways of knowing and how this fits in with cognitive, rational ways of knowing.

Theoretical Models of Intuition

Within this section, two subsections will discuss the most frequent models of intuition. Some theoretical models of intuition identify intuition as a primary mode of
thought or way of knowing that is opposite of that of rationality. Whereas others such as those suggested by MacLean (1970), LeDoux (1996), and DaMasio (1999), employ a neuroscientific approach, and propose models of intuition that state intuition occurs because of the functioning and biological makeup of the human brain.

*Modes of thought.* This section will define modes of thought and discuss how the intuitive mode of thought fits in with, and alongside of rational modes of thought. Modes of thought or ways of knowing are defined as the way individuals process information in order for the information to have meaning to them (Ferro, 1993; Flannery, 1993; Pickstone, 2001). Initially, legitimate ways of knowing were believed to be derived solely from science, empiricism, rational and linear processes as stated in the previous section on cognitive learning theory; however today, people are beginning to realize that there is untapped power and wisdom within us. Due to the growth of cognitive science and research as well as the philosophical movement from the positivistic paradigm to a post-positivistic paradigm, a number of other modes of thought both rational and nonrational are accepted (Goldberg, 1983; Streubert-Speziale & Carpenter, 2003).

Intuitive knowing is continuous, simultaneous and multirelational, whereas analytic knowing is discrete, consecutive and binary (Bastick, 1982). Polanyi (1967) states that intuition is fundamental to all knowing. Adult educators are beginning to recognize intuitive knowing (Benner & Tanner, 1987; Rew, 1990), emotional knowing (Gardner, 1983, 1999; Goleman, 1995; LeDoux, 1996; Pert, 1997), implicit or tacit knowledge (Polanyi, 1958), subconscious knowing (Polanyi, 1967), spirituality and imagination (Dirkx, 2001; Tisdell, 2003) and unconscious ways of knowing (Taylor, 1997, 2001) as important components of the learning process, practice, decision-making
and problem solving (Apostal, 1991; Cooper, 1994; Epeneter, 1998; John, 1992; McMahon, 2000; Mott, 1994; Ruth-Sahd, 1993, 1997, 2001; Wall, 1998; Watts, 1997). Furthermore, adult educators are investigating how intuitive ways of knowing may be taught and fostered in the classroom (Royse, 2001).

Jung (1964, 1968) proposed that intuiting and thinking are among the two most basic ways of knowing. Since Jung others have suggested the same. Tversky and Kahneman (1983) called these two modes of knowing natural/heuristic and extensional, Epstein (1998) calls them experiential and analytic/rational. Weinburger and McCleeland (1991) calls them implicit and explicit. Bucci (1985) identifies them as nonverbal and verbal, and Labouvie-Vief (1990) used the terms mythos and logos. Other terms used to describe ways of knowing are holistic/atomistic, parallel/sequential, metaphoric/rational, Dionysian/Apollonian, indirect/direct, left brain/right brain, abstract/concrete (Noddings, 1984). Bargh (1989) identifies these ways of knowing as automatic and/or deliberate.

Nonaka (1994) further discussed automatic knowledge. Nonaka equated automatic knowledge tacit unconscious knowledge. He states there are two types of knowledge, explicit and tacit.

Explicit or codified knowledge refers to knowledge that is transmittable in formal, systematic language. On the other hand, tacit knowledge has a personal quality, which makes it hard to formalize and communicate. Tacit knowledge is deeply rooted in action, commitment, and involvement in a specific context (p. 16).
Nonaka (1994) suggests that tacit knowledge include both cognitive and technical elements such as concrete know-how, and skills that apply to specific situations. He believes that “tacit knowledge may lie at the heart of the knowledge creating process” (p. 20) and one may possibly be able to convert tacit knowledge into explicit knowledge through the use of metaphors that are symbolic of that knowledge. Intuitive thinking is characteristic of experience and its product is tacit knowledge.

Recognizing that people utilize different ways of knowing, or combinations of ways of knowing to process information and make meaning is essential in teaching and learning settings in order to facilitate the learning process. For example, appeals to emotion, personal experience, and the use of concrete examples are more effective for individuals who process information via the intuitive mode (Royse, 2001). On the other hand, individuals who process information primarily from the analytic mode benefit by having facts with logical arguments presented to them (Epstein, Pacini, Denes-Raj, Heier, 1996). Rather than using analytic ways of knowing OR intuitive ways of knowing experts argue for a more eclectic approach based on the fact that nursing, as well as many other professions are not purely rational or intuitive or exclusively a science or art, but instead a combination of art and science and rational thinking, knowledge, experience, and intuition (Bryans & McIntosh, 1996; Eason & Wilcockson, 1996; Johnson, 1996). Recognizing that knowledge comes from a variety of sources, both scientific and nonscientific, rational and nonrational, as mentioned above, this study will focus on the nonrational stance as to how information is processed via the intuitive way of knowing.

Post positivistic philosophy has highlighted that severe limitations exist when taking on a purely rationalistic approach to deal with the complex situations in our world.
Dualism between intuition and intellect is false. Uncovering ways in which explicit knowledge and implicit ‘know how,’ reason and intuition, are braided together as suggested by Atkinson and Claxton (2000) enhances the ways of knowing that may be employed in professional contexts. More holistic ways of knowing accepting the full repertoire of knowing is a holistic way of knowing. Cappon (1994) states that linear reasoning must be complemented by lateral reasoning, and logic must be complemented by insight and wisdom. He further believes that intuition and reason interact in a meaningful way. Intuition and linear reasoning exist side by side in a collaborative relationship, that is increasingly being recognized as a key element in discovery, problem solving, understanding and knowledge generation (Entwistle & Marton, 1994; Goldberg, 1983; Paul & Heslip, 1995; Polge, 1995).

Bastick (1982) after doing a comprehensive review of the philosophical and psychological literature proposed a theory of intuitive thought where intuition is considered to be a universal characteristic of human thought. Bastick, states that, “people encode information emotionally, our thoughts and behaviors are then decoded versions of this information which, associated by their contiguous common feelings, tend to be recalled when we experience these emotions” (p. 354).

Bastick developed what he calls “emotional sets” which is a grouping of feelings, thoughts, emotions and behaviors that have come to be associated with a certain experience. When a person encounters similar experiences, the emotional set becomes triggered and influences a persons thoughts and behavior. Therefore, intuition is the process of making associations among feelings that have been previously encoded. Bastick’s theory emphasizes the role that emotion, and cues that invoke emotion, can
play in intuitive thinking. Bastick’s theory provides part of the theoretical foundation for this study as it identifies that intuition is a universal characteristic of human thought and recognizes the importance of emotion, and, the connection between emotion and experiences as being relevant to ways of knowing.

Agyakwa (1988) an educational intuitionist, asserts that “intuition is capable of yielding knowledge” (p. 164) and bases his beliefs on Bertrand Russell’s claim that all knowledge of truths depends upon our intuitive knowledge. Agyakwa presents four models of intuitive knowledge. The models are: (a) Not seeing but “seeing” which implies a nonsensory precognition form of intuition; (b) Seeing and perceiving- which accounts for the innate sensory types of intuition;  (c) Seeing and “seeing,” which encompasses the moral and aesthetic domains of intuition, and lastly; (d) “Seeing” which is the intuition that the expert professional has based on experience. Agyakwa defines intuition as a human ability that when accessed offers an awareness of life outside the cognitive domain. Table 2.1 describes the Agyakwa four models of intuitive knowing.

When summarizing the existing modes of thought and theories of knowing, one may see that intuitive knowing is continuous, simultaneous, multi-relational and considered to be fundamental to all types of knowing. Whereas analytic knowing is discrete, consecutive and binary. There continues to be this dualistic thinking between one or the other, rationality or intuition, as being the tools individuals may choose between to guide decision-making. Hammond’s Cognitive Continuum Framework (1988) serves to reconcile the opposing extremes of thinking by suggesting that individuals may choose based on the context of the situation. Yet, I am suggesting that
individuals use BOTH at the same time to guide thinking and decision-making thereby providing the individual with a more holistic way of knowing.

Table 2.1 Agyakwa (1988) Four Models of Intuitive Knowledge

<table>
<thead>
<tr>
<th>Model</th>
<th>Source of Intuition</th>
<th>Types</th>
</tr>
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| Model 1: General Intuition | *Psychological intuitiveness  
* Phenomenon with which human beings are endowed in varying degrees.  
* Nonsensory. | Precognition, Telepathy, Clairvoyance  
{Extrasensory perception} |
| Not Seeing (Literal) but “Seeing” (metaphorical) | | |
| Model II: Mathematical model of intuition | *Self-evident truths involving abstract logical & arithmetical or geometrical principles.  
* Sensory intuitions i.e., intuitions that are aided by visual images. | Rational intuitionism |
| Seeing (Literal) and perceiving | | |
| Model III: Intuitive insights from the moral and aesthetic domains | *Insights come in a flash  
* Insights largely subjective and consequently could not form the basis of any axioms | When one sees a work of art or hears a piece of music, the aesthetic effect is immediate.  
Romantic attraction  
Immediate awareness of moral values (visual images may not be pronounced) (Ross,1930) |
| Seeing (Literal) and “seeing” | | |
| Model IV: Professional Insight | *Based on previous experience or exposures.  
* Suggests intuition is trainable. | Intuitive grasp that allows one to go straight to the heart of the problem  
{Expert Knowledge} |
| “Seeing” | | |

*Neuroscience.* The field of neuroscience offers several biological based theories as to how information may be processed intuitively. This section will discuss several of the thoughts regarding the neuroscientific origins of intuition. Early philosophers believed intuition was a gift from the Gods, or that it originated in a person’s soul. In the fifth century, philosophers such as Aristotle and Plato tried to determine whether the
heart or the brain was the source of intuition. In the nineteenth century, phrenologists such as Gall, palpated the brain in order to determine moral, emotional, and intellectual traits of a person (Restak, 1997). Today, it should be noted that researchers continue to search for the exact area of the brain from which intuitive abilities originate.

A triune brain theory posited by Dr. Paul MacLean (1970) suggested that our brain is like having three brains in one, a reptilian, mammalian and a neo-cortex. The earliest developed, reptilian brain, or the sensory motor brain, is responsible for our response to fear, basic needs for food shelter and territory. The second evolutionary level the mammalian brain, supervises emotions, relationships, motivation and learning. This he calls the emotional cognitive brain. MacLean contends that intuition originates in the mammalian brain, signaling the person to respond with emotion. The third brain, the neo-cortex, is the center for higher order thinking skills requiring the intellectual-creative thinking. Examples of this brain potential involve analytical assessment, application, evaluation and synthesis.

A holographic brain theory, posited by neuropsychologist Karl Pribram, contends that the storage and processing of information in the brain is similar to waveform patterns in a hologram. This allows for each bit of knowledge to be retrieved in all areas of the brain and is not the result of a series of neuronal connections. Pribram’s theory could then account for the speed of intuitive insights (Goldberg, 1983).

The human brain has a right and left hemisphere possessing two different roles. The left cerebral hemisphere is responsible for language-based proficiency as well as the capacity to utilize logical, mathematical, and analytical processing. The right hemisphere, on the other hand, is responsible for the interpretation of sensory input from the left half
of the body. Information between the hemispheres is shared through connections between the two hemispheres called the corpus collosum. Some feel intuition originates in the right brain (e.g., Agor, 1984; Bastick, 1982; Goldberg, 1983), whereas others suggests that it emerges from the cerebral, neocortex prefrontal area of the brain and is most likely a function of both hemispheres (Clark, 1986; Restak, 1997).

LeDoux (1996) in carrying out quantitative studies looking at how the human brain processes fear, found that the amygdala acts quickly to interpret incoming information, thereby making an important connection between knowing and emotions. According to LeDoux, people have learned triggers, which allows them to realize what kinds of emotional responses are appropriate in a given situation.

Similar to LeDoux, DaMasio (1999) discusses the importance of emotions and the relationship between rational and emotional behavior. DaMasio studied people with damage to the cortical area of their brain and found that they were unable to make good personal and social decisions. For example, one of the participants, a good business and family man prior to his brain injury, afterwards however he was unable to make ordinary decisions, worked very slowly, could not understand the context in which he was acting, and consequently lost his job.

Sauter (1999), and Sadler-Smith (1999), emphasize an eclectic approach to intuitive information processing and presents a whole brain theory which allows one to use the analytic reasoning from the left brain, and the sensory processes of the right brain together in an effort to take advantage of their obvious symbiosis.

The limbic system is thought to be the oldest and most primitive part of the brain. This system includes brain structures that are activated by visceral responses to emotions,
motivation, mood, and sensations of pain and pleasure (Seeley, Stephens & Tate, 2000). Once activated, the limbic system influences the endocrine and autonomic motor systems. This brain physiology provides the fundamental basis for the majority of theories related to the origins of intuition.

While those noted above emphasized aspects of the brain, Leiberman (2000) contends that intuition does not originate in the cerebral hemispheres at all; rather he feels that the caudate and putamen, in the basal ganglia, are the primary components of both intuition and implicit learning. Utilizing a social cognitive neuroscience approach, Lieberman posited that social intuition is a phenomenological and behavioral correlate of knowledge obtained through implicit learning.

In considering the neuroscientific research and the theoretical models of intuition, various disciplines have critiqued and questioned their findings largely because intuitions specific origin, how exactly it works, and how it ‘fits’ with rationality continues to be a mystery. Not having this fully explained has led many scholars and professionals alike to devalue intuition as a legitimate way of knowing. Therefore, this will be discussed in the next section of this literature review.

Legitimization and Resistance to Intuition as a Legitimate Way of Knowing

Over the years intuition has met resistance as a legitimate way of knowing on several levels. The patriarchal institutions of higher education that value positivistic ways of knowing have not unanimously supported intuition (Rew & Barrow, 1989; Lammond & Thompson, 2000). In addition, resistance also occurs on an individual level. Individuals refuse or deny using intuition because of its lack of acceptance in the rationalistic educational society (Burton, 1999). Several quantitative tools to measure
and quantify intuition were identified. This seems to be incongruous with the qualitative nature of intuition. Moreover, these quantitative tools seem to be a means for researchers to legitimize intuition within the rationalistic paradigm. An overview of these tools will be presented later in this section.

*Institutional resistance.* While there is a preponderance of literature that supports the reliability and validity of intuition, skepticism and resistance towards intuition as a legitimate way of knowing continue to be present (Pyles & Stern, 1983). Many in higher education have questioned whether intuition should have a respected place in nursing knowledge (Lamond & Thompson, 2000; Sarvimaki & Stenbock-Hult, 1996). Some of this resistance comes from the fact that there has been little effort to develop consistency of meaning for this phenomenon (Wall, 1998) and because of the factors noted in the previous section.

Epeneter (1998) conducting a descriptive quantitative study of 330 nursing faculty suggests the following reasons for the devaluation of intuition in the nursing. These reasons are: a) the many definitions of intuition, b) difficulty with measuring intuition, c) a culture in education that values rationality, scientific method and the medical model, d) intuition is a threat to the profession of nursing, and e) concerns regarding how to teach intuition.

Another factor contributing to the resistance toward intuition is that there are minimal articles or stories that discuss the notion of intuition leading the individual to error, therefore a one sided representation of intuition is presented in the literature. Hogarth (2001) notes that care must be taken to show when intuition has brought about incorrect conclusions. Silva (cited in Rew, 1991), pacifies this concern by stating that,
“knowledge from intuition may not always be correct, but neither is knowledge arrived at with all the advantages of the scientific method” (p. 62).

Historically, within the culture of higher education, valid knowledge was thought to originate only from science and rational ways of knowing. During the pre-enlightenment era, if the origin of knowledge could not be explained it was thought to be from the Gods. Post enlightenment, the scientific method was edified and consequently intuition was not favored because it was not scientific and could not be quantified. As a society we continue to be strongly rooted in positivism which carries over into the educational system as well. As postmodernism and post-post modernism emerge, with the perspective that knowledge is tentative, multifaceted, and not necessarily rational (Arslanian-Engoren, 2002; Kilgore, 2001; Tisdell, 1995, 1998) educators as well as professionals in other fields are beginning to embrace educational theories that allow for multiple realities, and intuitive ways of knowing (Wilson and Hayes, 2000).

The challenge that educators’ face today is to rise up against the hegemonic learning culture and societal influences that privilege rationality (from the Western culture) and create a learning environment that demystifies the concept of intuition and allows the student to recognize its value and role in critical thinking. As the cultural diversity in our classrooms continues to increase, as well as the number of nontraditional students the future of education must implement a multicultural curriculum that embraces diverse ways of knowing (Flannery, 1995; Lauri et al., 2001; Quevedo, 1997; Ruth-Sahd, 2003; Tisdell, 1995).

Educators who recognize the impact of cultural and societal influences on intuition are better able to educate their students regarding misconceptions. For example,
cultural sayings such as “look before you leap” and “think before you act” suggests that one’s impulses or intuitions tend to be flawed (Lieberman, 2000). Secondly, educational institutions as well as journals and conferences give “little attention to the development of intuitive understanding” which implies that intuition is not highly valued as an outcome of education (Bruner, 1977, p. 56). This may be reversed with planning and the selection of required readings that evidence validity in intuitive ways of knowing.

The content laden curriculums must find time for the educators to foster and encourage reflection, creativity, Socratic questioning, and spirituality all of which foster intuitive development. By sharing personal stories involving intuition with students, educators may enhance intuition through role modeling (Garrison & Archer, 2000).

*Personal resistance.* In addition to institutional barriers, there are personal barriers that inhibit the individual from using and teaching intuition. These barriers are self-doubt, negative responses from others, and time constraints, (Agor, 1985; Burton, 1999; Klein, 2003). Other barriers noted were lack of exposure to intuition in educational settings (Epeneter, 1998), unclear role boundaries, risky outcomes, and the fear of making an error if acting on intuition (Khatri & Ng, 2000).

Educators may begin by first identifying how they themselves feel about intuition noting that their underlying belief systems and values guide their practice (Taylor, 1997; Tisdell & Taylor, 1999; Wilson & Hayes, 2000). Next, educators may define intuition for themselves within the spectrum of their own practice recognizing that the language chosen to define intuition in the professional literature has shown a general lack of consistency. For example, intuition defined as a psychic source of information is
pejorative in some schools of thought whereas it is respected in some others (Little, 1991).

The most frequently cited barrier noted in the literature in nursing, as well as other diverse disciplines was negative responses from others (Gardner, 1988; Hancik, 1991). This negativity comes from the lack of trust and support from co-workers. Nurses felt they “were being made fun of for not using a scientific way of knowing” (Rew, 2000 p. 96). Previously, Rew (1991) identified that individuals are more likely to use intuition if they feel respect and trust from others, get positive feedback from their colleagues, have confidence in themselves as intuitive individuals, have had successful outcomes based on intuition in the past, and possess a strong knowledge base of intuition.

The work of Jerome Bruner (as noted earlier) again is important for educators who try to foster intuition in their students. Bruner noted that intuition does not thrive in an overly structured, self-conscious setting. Apprehension and anxiousness have been reported as common reasons students and practitioners do not openly admit to the use of intuition (Miller & Rew, 1989; Rew, 1989). Students who sense the freedom and security to express their intuitive feelings will be more likely to do so. The work of Parker Palmer (1993, 1998) and creating a safe, accepting learning environment also has implications for the future of intuition in the classroom.

Studies (Cooper, 1997; McCormack, 1992a) have evidenced that because intuition was not learned in nursing school, and consequently nurses felt it was not a legitimate way of knowing and therefore were not likely to admit to using it. Agor (1986) noted other factors that impede the use of intuition as not being relaxed with one’s self, not being reflective, not taking adequate time, and not trusting one self.
Existing tools to measure intuition. Quantitative tools that were identified in the literature to measure intuition are as follows: in the field of psychology, the Myers-Briggs Personality Type Indicator (Briggs & Myers, 1976), and the Westcott Measurement of Intuitive Leaps (1961). In the field of nursing, the Miller Intuition Instrument (Miller, 1990, 1993), the Himaya Intuition Semantic Scale (Himaya, 1991), the Rew Intuitive Judgement Scale (Rew, 1988), the Faith in Intuition Scale and the Measuring the Use of Intuition by Nursing Students Scale (Smith, 2003). The Agor Assessment of Intuition in Management survey was developed by Agor (1983) to measure the use of intuition by business executives. Only one qualitative tool was located in the literature, which is the Young Intuitive Knowledge Scale (Young, 1987).

Myers-Briggs Personality Type Indicator (MBTI) (Briggs & Myers, 1976), was the most frequently sited quantitative tool and serves as the basis for many of the other tools sited here, for example the Miller Intuitive Instrument. The MBTI is a 150-item personality analysis instrument. Once it is answered it categorizes the individual into one of 16 personality types. Eight of the types of personalities have intuition as a functioning component. Estimates of reliability, including split-half, coefficient alpha, and test-retest reliabilities, which indicate acceptable levels of reliability for the scores.

Westcott’s Measurement of Intuitive Leaps (1961) is an instrument that determines the distribution of individuals along two dimensions: willingness to make inferences based on limited information, and the degree of correctness of conclusions reached (Westcott, 1961, p. 267). This tool is a series of twenty problems, which then profiles the subject as an intuitive thinker (those using minimal data to reach conclusions), wild guesser (those using limited information but arriving at incorrect
conclusions), careful successes (those using a lot of information to arrive at correct conclusions), and lastly careful failures (those utilizing a lot of data but arriving at incorrect conclusions).

Miller Intuition Instrument (MII) (Miller, 1990, 1993), based on the MBTI was developed by Dr. Virginia Miller as part of the requirements for her doctoral degree in Nursing at the University of Texas at Austin. (See Appendix C). The MII provides a means to quantify practicing registered nurses’ self-perception of intuitiveness. The 43-item instrument utilizes a six-point scale with the selection range of never to nearly always. From a review of the literature, Miller identified six characteristics of intuitive nurses. These characteristics included 1) acknowledgment of intuitive experiences, 2) confidence in intuition, 3) skilled clinical practice, 4) willingness to take unconventional approaches to problem solving, 5) awareness of spirituality in practice, and 6) interest in the abstract nature of things (Miller, 1993). A Chronbach alpha coefficient of 0.94 was calculated for the MII. Miller used a convenience sample of 228 registered nurses obtained from the Texas Board of Nurse Examiners. Evidence of criterion related validity was examined through the use of the MBTI and was demonstrated by the positive relationship between the intuition score on the MBTI and the total score of the MII (Miller, 1993).

The Himaya Intuition Semantic Scale (HINTS) (Himaya, 1991), was developed by Dr. JoAnn Himaya as part of her doctoral work in nursing at the Texas Woman’s University. Himaya defined intuition as an unstructured mode of reasoning which involves understanding the inner nature of things without a rationale. This instrument has four measurement components: wholeness, approximation, spontaneity, and
personalization. The goal in developing the HINTS was to measure intuition and assist nurses to learn information on their preferred mode of decision making. This tool could not be located in the published literature as far as being used in any studies; however, it was located in a doctoral dissertation completed by Handy (1999).

Rew developed the Acknowledges Using Intuition in Nursing Scale (AUINS) (Rew, 2000) to measure nurses’ acknowledgement of using intuition in clinical decision making. Presently, there is a 21-item multidimensional scale and a 7-item unidimensional Likert scale. Rew (2000) defined intuition in the clinical situation as, “a component of complex judgement, the act of deciding what to do in a perplexing, often ambiguous and uncertain situation” (p. 95). Although this is in the preliminary stages of development, this tool has proven to be reliable and valid.

Smith (2003) found that there were no sufficient tools to measure the use of intuition by the nursing student. Consequently, she developed a 25-item tool based on the physical, emotional, and spiritual dimensions of intuition as noted by Vaughan and as evidenced in the literature. The sample for this tool development included 349 BSN and ADN nursing students. Smith’s instrument measuring the use of intuition by nursing students had seven factors with Eigenvalues ranging from 1.010 to 4.0107 and factor loadings ranging from 0.53 to 0.58. Chronbach’s alpha for each factor ranged from 0.69 to 0.84 and was 0.89 for the overall instrument.

The Faith in Intuition scale is a 12-item scale developed by Epstein, Pacini, Denes-Raj, and Heier (1996) to assess the intuitive-experiential aspect of the cognitive-experiential self-theory as developed by Epstein. This theory suggests that people process information by two parallel, interactive systems: a rational and an experiential
system. This scale is felt to have face validity and adequate reliability. The scale uses a 5-point scale ranging from completely false to completely true.

The Assessment of Intuition in Management survey (Agor, 1983), was developed as a way to measure intuitive ability and use of intuition in making management decisions among business professionals. This survey contains 12 dichotomous choice items in order to identify ability to use intuition.

The only qualitative tool located in the literature was the Young Intuitive Knowledge Scale (Young, 1987) and is used to identify the degree of intuition used in a judgment process. In looking in the literature it was interesting to find a large variety of quantitative tools to measure such a qualitative phenomenon as intuition. It was evident that many researchers are using a positivistic approach in attempts to quantify intuition and fit intuition into a rationalistic box.

This study, chose participants from a previous quantitative study (Ruth-Sahd & Hendy) who had a high self-perception of intuitiveness (having a score above the mean of the sample tested) as measured by the Miller Intuitiveness Instrument. In this way a purposeful sample was identified to fulfill this qualitative research. The emphasis in this study was to understand the meaning of intuition to novice registered nurses; therefore, a qualitative approach is most appropriate. See Appendix C for the Miller Intuitiveness Instrument.

Summary

In summary, there are many theoretical models of intuition that lay the foundation for this research. Several key points were present in the literature regarding intuitive knowing which are foundational for this study. First, intuition is seen as a way to process
information. Second, while some studies see intuition as being separate from rationality other studies addressed how intuition is part of rational thinking NOT separate from it. Rationality may be used to validate and confirm information obtained from intuition (Eason & Wilcockson, 1996; Kenny, 1994; McCormack, 1992b; Rew, 1986, 1987, 1988b). Pyles & Stern (1983) found that intuition guides’ rational thinking and acts as the catalyst that initiates the thinking process. Similarly, McMahon states that intuition is “an invitation to go further” (1999).

The third key point is intuition is multidimensional and holistic. This way of knowing affords one the opportunity to tune into the affective domain and reach feelings, emotions, physical awareness, and spirituality in order to guide decision-making and problem solving (Eason & Wilcockson, 1996). Intuition is holistic, which allows one to see ‘bigger chunks’ the “gestalt” of information at the same time and not just focus on one particular aspect at a time (Atkinson & Claxton, 2000; Gee, 1999).

The Concept of Intuition

This section will explore the historical development of intuition, define the concept of intuition, and identify types, levels, and voices of intuition. Characteristics of intuitive individuals will also be described and lastly, various professional disciplines will be highlighted in an attempt to evidence the diversity of intuition. This section is set up this way to provide an in-depth look at intuition beginning with it historical roots, moving to how it is defined today. Next the voices, levels and types of intuition will be presented, as they are evident today in various related professional disciplines.
Historical Perspective on the Development of Intuition

This section will discuss the historical progression of intuition through the ancient, views, the Middle ages, the Renaissance period, up through the nineteenth and the twentieth centuries, highlighting key aspects of its development. Investigating historical perspectives of intuition allows one to identify its origin, gain an appreciation for the development and changes of this concept, and become cognizant of how generations of philosophers, educators, and laypersons have used the term. While this is not an exclusive historical or philosophical account, it will attempt to identify the development of intuition beginning with the ancient views, followed by the middle ages, the renaissance to the eighteenth century, up through the twentieth century. Noddings and Shore’s (1984) most comprehensive historical overview of intuition as noted in their text *Awakening the inner eye: Intuition in education* guides this historical analysis. Although this analysis deals strictly with Western thought, it is necessary to mention that Western thought was strongly influenced by non-western religions such as the Buddhism, Hinduism, Zen and Sufism (Noddings & Shore, 1984).

Eastern societies have valued intuition as a concept for many thousands of years and consequently influence our thinking and current interpretations of intuition. The Chinese, for example, value intuition and gain information about their earthly life from the interpretation of their physical environment. Hindu beliefs, view intuition as a disciplined spiritual act, requiring deep concentration to focus on cosmic principals rather than on earthly ones (Noddings & Shore, 1984). Buddhists believe intuition to be a source of ultimate truth and wisdom. Zen Buddhism believes that through quieting one’s mind and spirit through meditation one can obtain intuitive illumination.
Ancient views of intuition. Prehistoric and ancient literate societies accepted knowledge from many different sources. External knowledge from the physical and environmental world was always considered to be as important as knowledge from internal impressions that arose from the individual or from the entire community. At this time there was not a clear distinction made between external stimulus and internal impression or intuition.

A seer or oracle, a prominent member of the community, was believed to have the ability to receive messages or gifts from the Gods or angels (Lomas, 1993). These gifts allowed them to predict the future, provide insights into the past or present, and be able to interpret and examine the intuitive experiences of others as sources of knowledge (Noddings & Shore, 1984). This knowledge was regarded as the most valuable kind of knowledge.

Both rational and nonrational ways of knowing were considered to be valid by the classical Greeks and Romans. Greeks and Romans continued to see intuition as nonrational, but in addition, believed it was a way to connect with the spiritual world. As Greek philosophy developed, kings and slaves alike believed in intuitive ways of knowing as derived from visions, insights or dreams. Pythagorus, a Greek philosopher and mathematician, believed that intuitively apprehended numbers could provide profound knowledge about the universe. However as time passed, and intuition began to yield inconsistent results, intuition became devalued in scientific circles (Davis & Davis, 2003; DePaul & Ramsey, 2001; Noddings & Shore, 1984).

Following Pythagorus was Plato who regarded intuition as a reliable source of knowledge and felt that all learning and education is a matter of pulling out that
knowledge. Although Plato, in his theory of ideals, was unsure of the exact origin of intuition, he devoted great efforts to the notion of intuition and posited that it was implanted in the soul (Davis-Floyd & Arvidson, 1997). It was noted that Plato’s *Republic* was largely derived from his intuitions regarding the nature of humankind (Noddings & Shore, 1984).

Aristotle (1953, 1976), a disciple of Plato, discussed intuition at great lengths and believed it to be “an infallible source of truth” (p.7) that existed without proof. He believed that these intuitively known truths ultimately depended upon induction and were more significant than universals of science (Davis & Davis, 2003; Dreyfus & Dreyfus, 1986). In the *Posterior Analytics* Aristotle wrote:

Now of the mind’s techniques by which we come to know the truth, some are always true, while others, such as opinion and calculation, may err. Scientific knowledge and intuition are, however, always true. Furthermore, no other kind of thought except intuition is more accurate than scientific knowledge.

(Translated by Noddings & Shore, 1984, p. 7)

In *The Nichomachean Ethics* (Translated 1987), Aristotle states,

If then the means by which we apprehend truth…are science, prudence, wisdom, and intuitive reason, and if it can be no one of the first three, which is the means or instrument of apprehending first principles, the only possible conclusion is that these principles are apprehended by intuitive reason (p. 194).

What Aristotle suggests is that intuition is the only means by which humans may perceive or understand God and that intuitive reasoning is a direct pathway to truths. Aristotle did not see intuition as a religious or spiritual gift, but rather he believed it was
related to the sense of perception and memory that would ultimately bring one closer to God.

Plotinus, the greatest of the Greek mystics, and one of the most important thinkers of the late classical period, believed that true knowledge was derived from a special kind of seeing. He wrote:

To see and to have seen is no longer reason. It is greater than reason, before reason, and above reason, as is also the desire [to see]….Therefore what is seen is indeed difficult to convey as it is one with himself.

(Translated by Noddings & Shore, 1984, p. 8)

During the late classical period, “Intuitionism,” concerned with morality and ethics began to surface. This philosophical school of thought began in the West by the Cynics who believed that knowledge, derived from intuition is morally good. They felt that man possesses an instinctive right to do what is good, also called will power, and therefore man should not be confined to the rules of society. The Cynics opened a pathway for future philosophers to investigate the notion of ethical values through the subjective, innate potential of each individual (Noddings & Shore, 1984). These thoughts seem to relate very closely to present day notions of individualism and liberalism.

Closely aligned with Cynicism, was Epicureanism founded by the Greek philosopher Epicureus, which placed value on the individual experience. Epicureus posited that in addition to the five physical senses, human beings have innate ideas or anticipations very much like intuitions, which provides them with knowledge to deal with the surrounding universe (Noddings & Shore, 1984). Self-awareness was the means to obtain this information.
During the later part of the classical period, in the educated classes of the Roman Empire, the growing power of Christianity caused a rise of philosophical skepticism. It was during this time that people became less impressed with seers ability to use intuition and began to question its validity (Noddings & Shore, 1984).

The Middle Ages. During the Middle Ages up through the Renaissance and the eighteenth century, many people such as the North American Indians, Anglo-Saxons, as well as African and Asian cultures continued to value seers intuitive knowledge (Noddings & Shore, 1984). While later in the Middle Ages, the rise of the Renaissance science and technology and rational empiricism separated most intellectuals and educators from intuitive knowledge. The establishment of major universities in the early medieval period gave rise to the foundation for the emergence of educational practices based largely on positivistic principles that we continue to practice today (Broadfoot, 2000).

William of Ockham, a medieval philosopher, believed that statements that could not be proven by either scientific or logical means were true. In an effort to explain this, he presented three types of cognition: 1) intuitive - immediate contact with objects; 2) abstract – the ability to picture that which is not perceived; and 3) divine – through the agency of God. Thus man carries out God’s will when he intuits (Noddings & Shore, 1984). Ockham’s notion of contact with objects is important historically as it has strongly influenced the thinking of Immanuel Kant. The notion of carrying out God’s wills is also significant in the history of intuition, as this is a common thread that repeats itself in history.
The Renaissance period. During the Renaissance period, a time of intellectual revival, the mystical nature of intuition continued to be prevalent as evidenced by the predictions of Nostradamus in the 1500’s. Many societies today, including our own, continue to utilize people who can “see” into the future or make predictions.

In the seventeenth century, Rene Descartes declared that “rational intuition” was the only way to gain true knowledge. His idea of intuition was very similar to the medieval scholars in that he attempts to combine the respected rationalistic viewpoints with God. He stated:

Intuitive knowledge is an illumination of the soul, whereby it beholds in the light of God those things which it pleases Him to reveal to us by a direct impression of divine clearance in our understanding, which in this is not considered as an agent, but only as receiving the rays of divinity. (Randell, 1962, p. 388)

Following Descartes was Benedict Spinoza who identified a tripartite division of knowledge including, a) intuition as defined as the immediate knowledge without use of general principles, b) apprehension, and c) rational thought which uses principles and then deduces its conclusions. Spinoza felt that intuition was the highest form of knowledge and therefore superior to rational thought. As one may see, both Descartes and Spinoza valued intuition and felt that it added to the rational reasoning process (Randell, 1962).

Early in the eighteenth century, with Newtonian physics and rise of rationalism, people did not think about the mysticism of intuition, rather they were more concerned with the nature of rational thought. Yet, despite this, Immanuel Kant was credited for shaping and clarifying the concept and meaning of intuition. Kant defined intuition as a
“nonrational recognition and awareness of individual entities” (Noddings & Shore, 1984, p. 14) and linked it with sensual perception. Later however, Kant was criticized, as he did not recognize biological or physical factors, and the role of motivation, all of which may affect one’s ability to be intuitive.

In the Romanticism movement, natural virtues of the individual such as emotions (intuitions) were emphasized. Jean Jacques Rousseau, in his educational treatise Emile, spoke about how children are basically good and that these good qualities are smothered by rigorous educational instruction and consequently suppress their true feelings. Consequently, Rousseau recommended a kind of pedagogical intuitionism where humans are always in touch with their true feelings (Noddings & Shore, 1984).

When noting common threads thus far in the beliefs held by Aristotle, Epicurus, Kant and Rousseau one can see how they all believed intuition was an innate human trait which enhanced the individuals decision making ability. Another common thread thus far is that intuition is a nonrational ability, obtained outside of the rational mind.

*The Nineteenth century.* By the early nineteenth century, rational thinking had gotten as out of hand as metaphysical thinking had in the medieval and early Renaissance times. Foucault (1972) identified this as a preoccupation with rationality. Continuing into the nineteenth century, there is a dialectical progression regarding intuition as a way of knowing. Some continue to believe intuition is a “forward-looking” notion, others go back to the medieval ideas, where intuition is a gift from the Gods, while others try to add to the medieval concepts and posit that intuition helps one to get closer to truth. Friedrich Schleiermacher, a Prussian theologian posited four types of wisdom: a) self-intuition, b) intuition of the world (religion and scientifically obtained knowledge), c) aesthetic
intuition, and d) philosophical speculations (Schleiermacher, 1965). He believed that all knowledge was intuitive and came from the Gods or in God. By linking disparate entities such as perception, religion, science, and intuition, Schleiermacher was considered a pioneer yet, at the same time others criticized him.

Italian philosopher, Vincenzo Gioberti was also investigating intuition during this time. He believed that “knowledge was basically intuitive and that in intuition, the subject apprehended the object immediately, with no operations performed by subject or object” (Noddings & Shore, 1984, p. 19). The contribution of Gioberti’s work was that an object presented to the mind was the idea, and the idea was what intuition encountered. Gioberti viewed learning as a spontaneous event that did not require any formalized operations.

Jesuit Serafino Sordi, opposed Gioberti’s work by positing that intuition was an act, performed by either the subject or the object, implying an image of the intuiters mind even if the idea has its origin in God and not human understanding (Noddings & Shore, 1984). Sordi was influenced by Aristotle’s work, and like Aristotle believed that intuition is a mental act that makes knowledge possible.

Rational ways of knowing continued to be a major strand of thought in the nineteenth-century that continued from the Middle Ages. Arthur Schopenhauer, (1969) a German philosopher, believed that scientific intellect works only from appearances, whereas the immediate or the intuitive knowledge of reality is created by representation within the human mind, directed through the Will (Noddings & Shore, 1984; Schopenhauer, 1969). Linking intuition with the Will was very important as this extended
the work of Kant by noting the contribution of motivation and the individual’s search for meaning. Kantian viewpoints continued to influence philosophers during this time.

By the end of the nineteenth century the science of psychology was beginning to grow and viewed intuition as another name for “uncontrolled imagination” (Noddings & Shore, 1984, p. 20). However Henri Bergson disagreed with this stating that intuition precedes intellect, while psychology attempts to understand the human mind, and the knowledge it provides is never complete. Bergson went on to state that everyone uses intuition. Bergson regarded intuition as the purest form of instinct, gained through self-reflection and creativity. Bergson felt intuition was used to gain a deeper understanding of reality (Bergson, 1946). Bergsons’ metaphysical definition sparked a renewed interest in intuition (Davis-Floyd & Arvidson, 1997).

The twentieth century. In the twentieth century, intuition continued to be debated as quantum physics and turned traditional scientific philosophies upside down. C. J. Jung, picking up on the earlier work of Freud and Aristotle, characterized intuition as a function that transmits perceptions meaningfully and unconsciously (Jung, 1971). Jung separated intuition into two types: a) subjective, the perception of the unconscious; and b) objective the perception of facts derived from thoughts and feelings from objects which is thought to imply internal and external intuition as noted by Noddings and Shore (1984). Later Jung approached intuition from yet another angle dividing it into concrete and abstract (derived from the Will). Jung’s work as published in his 1921 publication, Psychological Types continued to see intuition as a nonrational, perceptive ability.

Jung identified four universal and fundamental mental functions or types: intuition, thinking, feeling and sensation. The intuitive type individual is one who uses
perception thorough the unconscious. Jung’s work introduced intuition to many lay people, as they were now able to see how intuition is something different from spiritualness and mysticism. Although Jung’s work was criticized for being too rational, rigid and exclusive, he did encourage others to pay attention to this subject. Jung’s work strongly influenced Myers and Briggs who developed the Myers –Briggs Type Indicator, a personality descriptor that is used today (Myers & Myers, 1987).

American psychologist, Eric Berne (1977) drawing on the work of Jung and Aristotle, attempted to define a clearer definition of intuition for use in the field of psychology. Berne defined clinical intuition as an “unconscious source of knowledge based on experience and acquired through the senses” (p. 29). He went on to identify that intuition consists of two processes. The first is when intuition registers in the subconscious and the second is conscious verbalization of that perception (Berne, 1977).

Several weaknesses of Berne’s theory were later identified. Berne did not (a) consider the limits of language, as some intuitions may not be able to be articulated; (b) show an interests in how individuals from different cultures articulate intuitions; (c) recognize nonverbal intuitions; (d) recognize that some intuitions of the musical and kinesthetic nature may be impossible to articulate at all; and, (e) build on the work of his contemporaries as far as recognizing the contribution of spirituality (Noddings & Shore, 1984).

Although Berne’s work is considered to be narrow and linear, he made several significant contributions. First, from a psychological perspective, intuition can be empirically studied. Second, the notion of the “intuitive mood,” a state in which intuitive thinking is most likely to occur. According to Berne:
The intuitive mood is enhanced by an attitude of alertness and receptiveness without actively directed participation of the perspective ego. It is attained more easily with practice, it is fatigable, and fatiguing. Intuitions in different fields do not seem to interfere with one another. Intuitions are not all dependent upon extensive past experience in the given field. (Berne, 1977, p. 31)

Edmund Husserl, a phenomenologist, strongly influenced by Kant, defined intuition as a “source of authority for knowledge” (Husserl, 1970, p. 83), and felt that intuition is central to the learning process. His view formed an important link between the ancient seers and Kant with contemporary thinking about intuition. Husserl developed a holistic approach of phenomenology into a detailed inquiry of the structures of consciousness (Levinas, 1973; Noddings & Shore, 1998).

Alfred North Whitehead presented another theory of knowledge during this time. In *The Aims of Education* (1967), Whitehead described three stages of acquiring knowledge: romance, precision, and generalization. The stage of romance was synonymous with the intuitive mood earlier suggested by Berne. This also had similarities with the “anticipations” as posited by Epicurus (Russell, 1964).

Bertrand Lord Russell, a colleague of Whitehead’s took more of a mathematical, rational approach to intuition and spoke about “logical intuitions” which are concerned with notions of truth, concept, and class. Russell believed that all our knowledge of truths depends upon our intuitive knowledge (Russell, 1912, 1964). Russell’s notion of “knowledge by acquaintance” – a form of prelinguistic knowledge of concepts, is significant for educators to recognize as it emphasizes the importance of acquiring familiarity with objects.
During this time, phrenology, spiritualism, and other fields associated with quackery began to emerge, and consequently scientists, philosophers and educators began to have some suspicion regarding intuition. Additionally, the rise of Darwinism, and “scientific” psychology that attempted to explain human behavior, discouraged the investigation of intuition because of it being difficult to isolate and define (Noddings & Shore, 1984; Shaw, 2001).

Max Wertheimer, a psychologist, investigated the views of Gestalt psychology. Central to the beliefs of Gestalt psychologists is the notion that the whole is greater than the individual parts. Wertheimer related sense impressions to time and space in problem solving (Wertheimer, 1945). Common threads from Kant and Plato may be seen in Wertheimer’s work. In nursing, Pyles and Stern, utilizing Wertheimer’s theory, formulated a theory of nursing gestalt, which is “a synergy of logic and intuition involving both conceptual and sensory acts” (Pyles & Stern, 1983, p. 52).

One of the most creative figures of the twentieth century, is R. Buckminster Fuller, who noted that intuition is a principle tool of humankind in all of its endeavors and holds on to intuition as a source of truth. He feels intuition is the “key to humanity’s scientific discoveries” (Fuller, 1973, p. 50). He recognized that many of the scientific discoveries from ancient Greece onward were the result of intuitive insights. His contributions have echoed many of the thoughts and beliefs of scholars before him.

This historical analysis affords one with hindsight to see the many contributions and common threads that have persisted over the centuries as well as thoughts that have been abandoned. Common threads are that: a) intuition is a way of “seeing” which affords one with knowledge; b) there are many broad definitions of intuition; c) the origin
of intuition continues to be debated; d) intuition is a sense, that allows holistic perception; and e) the debate continues as to how intuition fits with rational thinking. Whereas ideas that have been abandoned, are 1) the notion that intuition is a source of truth, 2) intuition is a gift from the Gods to a select few individuals, and 3) intuition is infallible. See Appendix D for an overview of the historical development of Intuition.

Defining Intuition: The Conceptual Chameleon

To define intuition, one needs to consider the etymological definition of a word. The word intuition comes from the Latin word “inteuri” which means to look at, view, or look into. Intuition first appeared in the English language in 1627. The Oxford English Dictionary (1989), defines intuition as:

1) The action of looking upon or into; contemplation; introspection; a sight or view, 2) The action of mentally looking at; consideration; perception; recognition; mental view, as a motive of action; ulterior view; regard, respect, reference, 3) The spiritual perception or immediate knowledge, ascribed to angelic and spiritual beings, with whom vision and knowledge are identical.

4) The immediate apprehension of an object by the mind without the intervention of any reasoning process (p. 30).

Roget’s International Thesaurus (Roget, 1995) offers the following synonyms for intuition: intuitive cognition, emotional, guessing, heedless, impulsive, instinctive, feeling, idea, 6th sense, suspicion, involuntary, unreasoning, unreflective; discerning, insightful, knowing, perceptive.

From these sources, one may see first, intuition is looking within oneself for the knowledge that one holds. Hammond (1996) and Guiley (2001) calls this inner wisdom.
Second, intuition is a way of perceiving that guides decision-making and action (Berne, 1977; Gerrity, 1987; Jung, 1962; Zukav, 2000). Third, intuition is a spiritual perception (Rew, 1989). Fourth, intuition is rapid, speedy, sudden and effortless (Dreyfus & Dreyfus, 1986; Gerrity, 1987; Rew, 2000) allowing for one to “think on one’s feet” (Schön, 1983), and fifth, intuition does not involve reason and rationality.

Intuition, described as a universal characteristic of human thought (Bastick, 1982), was first sited in the literature more than 50 years ago (Wertheimer, 1945 and Heidegger, 1962); however, this concept was largely ignored because it was not felt to be scientific, logical, or involve sequential thought patterns and consequently was not considered to be a legitimate part of critical thinking. During the 1980’s research began to imply that individuals use both, logical and intuitive processes to make decisions (Bruner, 1977; Hammond, 1996; Miller & Rew, 1989).

Westcott (1968) defines intuition as “the process of reaching accurate conclusions on the basis of consensually inadequate information” (p. 8). Key elements in his definition are accuracy and the use of little information. Agan (1987), defines intuitive knowing as a “nonrational process based on a feeling or sensing level of knowing, an awareness that may come from subconscious data (p. 66). Benner and Tanner (1987) define intuition as “understanding without rationale” (p. 23).

Young (1987), in centering on intuition in nursing, initially defined intuition as a “process whereby the nurse knows something about a client that cannot be verbalized, that is verbalized with difficulty, or for which the source of knowledge cannot be determined” (p. 52). Young later refined this definition to include intuition as both a process and a product. As a process, he defined intuition as something that occurs
between the patient and the nurse, in which the present experience is associated with past experiences and feelings. The recognition of knowledge was then identified as the product of this process.

*Intuition the ‘conceptual chameleon.’* As intuition was researched over the years, in many different fields, diverse definitions began to appear in the literature describing both the intuitive experiences as well as the feelings of the person experiencing intuition (intuiter). Broadfoot (2000) used the phrase ‘conceptual chameleon’ to describe intuition (p. 215). Because intuition is a complex process and means many different things to many different people, Blackwell (1987) and others (Fischer, 2000; Gobbi, 1998; Hempsall, 1996; John, 1992; Kenny, 1994; Kline, 2000) state one all-encompassing definition is not possible. They suggest finding a definition that embraces a balance between reason and intuition. Table 2.2 discusses the many diverse definitions of intuition noted in the literature.

**Table 2.2 Diverse Definitions of Intuition**

<table>
<thead>
<tr>
<th>Source</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agan (1987)</td>
<td>Nonrational process, based on a feeling or sensing level of knowing, an awareness that may come from subconscious data.</td>
</tr>
<tr>
<td>Aristotle (1953)</td>
<td>Infallible source of truth</td>
</tr>
<tr>
<td>Arries, Botes, &amp; Nel (1999)</td>
<td>Situational factors: Experience and knowledge empathy and incomplete or uncertain data. <em>Intuition as a process:</em> Quick, interpretive, more synthetical-analogical than analytical, interpretive, holistic, irrational and goal-directed. <em>Intuition as a product:</em> problem-solving, rational justification of intuition by means of reflection.</td>
</tr>
<tr>
<td>Assagioli (1976)</td>
<td>“A higher form of vision” (p. 27)</td>
</tr>
<tr>
<td>Bastick (1982)</td>
<td>Universal characteristic of human thought; creativity begins with intuition and is only later shaped by reason. Derived from emotion.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Citation</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>Beck</td>
<td>(1998)</td>
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<tr>
<td>Benner</td>
<td>(1982)</td>
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<tr>
<td>Benner</td>
<td>(1984)</td>
</tr>
<tr>
<td>Benner &amp; Tanner</td>
<td>(1987)</td>
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<tr>
<td>Bergson</td>
<td>(1946)</td>
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<tr>
<td>Berne</td>
<td>(1977)</td>
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<tr>
<td>Blanchard</td>
<td>(1993)</td>
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<tr>
<td>Bruner</td>
<td>(1960)</td>
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<td>Burnard</td>
<td>(1989)</td>
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<td>Burns &amp; Grove</td>
<td>(2001)</td>
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<tr>
<td>Carper</td>
<td>(1978)</td>
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<tr>
<td>Cioffi</td>
<td>(1997)</td>
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<tr>
<td>Davis &amp; Davis</td>
<td>(2003)</td>
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<tr>
<td>Day</td>
<td>(1996)</td>
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<td>Doering</td>
<td>(1992)</td>
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<tr>
<td>Dreyfus &amp; Dreyfus</td>
<td>(1986)</td>
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<tr>
<td>Eason</td>
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<tr>
<td>Author</td>
<td>Quote</td>
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<td>----------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Wilcockson (1996)</td>
<td>passing linear methods of reasoning; … based on rational knowledge and experience (p. 672)</td>
</tr>
<tr>
<td>Einstein</td>
<td>The real valuable thing is intuition. (as noted in Goldberg, 1983)</td>
</tr>
<tr>
<td>Ralph Waldo Emerson</td>
<td>The primary wisdom is intuition</td>
</tr>
<tr>
<td>Emery (1994)</td>
<td>Intuitive information may be obtained from the environment</td>
</tr>
<tr>
<td>Gawain (2000)</td>
<td>Everyone is born with intuitive powers that end up getting suppressed</td>
</tr>
<tr>
<td>Gee (1999)</td>
<td>Every human being possesses this function of the consciousness of the being acting through the mind yet is deeper than the mind coming from the soul.</td>
</tr>
<tr>
<td>Gerrity (1987)</td>
<td>“Sudden perception of possibilities, meanings and relationships by insight” (p. 63) Perception beyond what is visible to the senses (p. 65)</td>
</tr>
<tr>
<td>Hales (2000)</td>
<td>Rational intuition; intuition about empirical facts is common sense</td>
</tr>
<tr>
<td>Hammond (1996)</td>
<td>Untapped source of wisdom (feelings) By getting in touch with these we may be more successful in life</td>
</tr>
<tr>
<td>Hansten &amp; Washburn (2000)</td>
<td>Ability to discern a situation without physical evidence and still decide on appropriate action. Clinical; sensing; based on experience, on accumulated knowledge, not always supported by logical evidence; a gut feeling</td>
</tr>
<tr>
<td>Hawkins (1998)</td>
<td>Knowing or understanding without thinking (p. 205)</td>
</tr>
<tr>
<td>Heaslip &amp; Paul (1995)</td>
<td>Learning that is done immediately effortlessly and without the benefit of conscious reasoning (p. 42)</td>
</tr>
<tr>
<td>Heidegger (1962)</td>
<td>An event on the way to truth</td>
</tr>
<tr>
<td>Hogarth (2001)</td>
<td>Formed passively through experience and can be explicitly educated 6th sense, reached with very little effort and without conscious awareness (p. 14) Human information processing (p. xi)</td>
</tr>
<tr>
<td>Ickes (1997)</td>
<td>Intuition is reached with little effort and without conscious awareness.</td>
</tr>
<tr>
<td>Jung (1964)</td>
<td>Belief is no adequate substitute for inner experience</td>
</tr>
<tr>
<td></td>
<td>Ability to perceive possibilities, implications, and principles without being burdened by details.</td>
</tr>
<tr>
<td></td>
<td>One of 4 mental functions thinking, feeling, sensing and intuiting.</td>
</tr>
<tr>
<td>Kant (1781)</td>
<td>Doctrine of Pure Intuition ~ Awareness of an object mediated by sensation. Awareness of an object through experiencing it.</td>
</tr>
<tr>
<td>Klein (2003)</td>
<td>The way experience us translated into action (p. XVI)</td>
</tr>
<tr>
<td>Lank &amp; Lank (1995)</td>
<td>Brain skill; operating largely from the right hemisphere; capable of entering awareness at physical, emotional and mental levels; sources are subconscious, unconscious and/or supraconscious; enters consciousness without rational thought or careful analysis and quantitative calculation.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Definition</td>
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<tr>
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<tr>
<td>Larsson (1910, 1912)</td>
<td>A higher form of intelligence, advance comprehension. Intuition is not in conflict with logic and rationality but it is a higher degree of logic. Feeling, experience and memories play an important part of intuition</td>
</tr>
<tr>
<td>Lieberman (2000)</td>
<td>Information processing</td>
</tr>
<tr>
<td>Lomas (1993)</td>
<td>Direct or immediate insight without a conscious awareness of a logical process or application of a theory</td>
</tr>
<tr>
<td>Miller (1988, 1993)</td>
<td>Immediate awareness of past, present, or future events without the conscious use of reasoning. Immediate sense of knowing. Gestalt experience based of the perception of cues linked together with the basic knowledge and past experiences. Intuition is synthesis rather than analysis.</td>
</tr>
<tr>
<td>Mitchell (1994)</td>
<td>Immediate process as a way to gain knowledge without evidence of rational thought that expands the already existing knowledge framework.</td>
</tr>
<tr>
<td>Myers (2002)</td>
<td>Capacity for direct knowledge, for immediate insight without observation or reason (p. 1)</td>
</tr>
<tr>
<td>Noddings &amp; Shore (1984)</td>
<td>Speeding up of the analytic reasoning process...because of the speed it is becomes difficult to identify the steps (43)</td>
</tr>
<tr>
<td>Orme &amp; Maggs (1993)</td>
<td>Heightened perceptual awareness that emanates from sub-conscious thought ...grounded in both knowledge and experience ...is used in making judgement ( p. 274)</td>
</tr>
<tr>
<td>Philipp, Philipp, &amp; Thorne (1999)</td>
<td>Carefully learned clinical skill which has to be developed within oneself as a therapeutic tool (p. 40)</td>
</tr>
<tr>
<td>Polanyi (1958)</td>
<td>Tacit Knowledge</td>
</tr>
<tr>
<td>Polge (1995)</td>
<td>Intuitive critical thinking. Creative, right-brain thinking, “gut reaction,” insight. A cognitive process w/ 3 defining attributes: 1) knowledge of a fact or truth is received as a whole, 2) immediate, 3) independent of linear reasoning</td>
</tr>
<tr>
<td>Preitula &amp; Simon (1989)</td>
<td>Sophisticated reasoning acquired by expert after years of learning. …from experience information is built into patterns (p. 122) …acquired by the expert (p. 122)</td>
</tr>
<tr>
<td>Pyles &amp; Stern (1983)</td>
<td>Matrix in which nurses link together knowledge and past experience (p. 52)</td>
</tr>
<tr>
<td>Quick (1981)</td>
<td>Fresh almost instantaneous, a deep down feeling that informs and guides us. It cuts through complexity like a flashlight beam that bores into the darkness, allowing us to see what’s really important (p. 378)</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Definition</td>
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<tr>
<td>Rew (1988)</td>
<td>Knowledge as a whole, immediacy of knowledge, and independent of linear reasoning; inner knowing, sensing/ feeling/ perceiving, and strength of feeling that affects perception.</td>
</tr>
<tr>
<td>Rew (1996)</td>
<td>Direct knowing without conscious reasoning; immediate understanding. Innate knowledge; immediate cognition, instinct, insight, guesswork, sixth sense, understanding, reason, intellect, soul, mind, acumen, presentiment, foreknowledge, inspiration, feeling.</td>
</tr>
<tr>
<td>Rew, (2000)</td>
<td>Deliberate application of knowledge or understanding that is independently distinct from the usual, linear, and analytical reasoning process. The decision to act on a sudden awareness of knowledge that is related to previous experience, perceived as whole and difficult to articulate.</td>
</tr>
<tr>
<td>Rew &amp; Barron (1987)</td>
<td>Knowledge of a fact or truth as whole; immediate possession of knowledge; and knowledge independent of the linear reasoning process.</td>
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<tr>
<td>Rew &amp; Miller (1989)</td>
<td>…patterns of personal knowledge through reflection…is synthesis rather than analysis (p. 86)</td>
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<tr>
<td>Rosanoff (2001)</td>
<td>Instinctive wisdom</td>
</tr>
<tr>
<td>Russell (1964)</td>
<td>Distinguishes between derivative knowledge and intuitive knowledge. Derivative knowledge is descriptive and derived from intuition. Intuition is self-evident knowledge, which cannot be proved.</td>
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<tr>
<td>Schraeder &amp; Fischer (1986)</td>
<td>Immediate knowing something without the use of conscious reasoning; Not guessing, but predicated on sound knowledge and experience. …linking perceptions from the past with the anticipated future (p. 45-51)</td>
</tr>
<tr>
<td>Schulz, Mona Lisa (1998)</td>
<td>Is a perception of seeing, hearing or feeling rather than thinking (p. 22). Intuition is another sense that all individuals obtain from their emotions</td>
</tr>
<tr>
<td>Shaw (2001)</td>
<td>Moral intuition is an immediate apprehension of the mind, without reasoning, about what is right to do in a particular situation” (p. 16)</td>
</tr>
<tr>
<td>Simon, (1978)</td>
<td>A rational process whereby the brain, evokes past memories and experiences to address the problem at hand.</td>
</tr>
<tr>
<td>Spinoza (1983)</td>
<td>Immediate perception of the eternal substance and its connection to all things. Intuition is an organ for metaphysical knowledge.</td>
</tr>
<tr>
<td>Spiro (1992)</td>
<td>Medicine is both science and narrative, both reason and intuition</td>
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<tr>
<td>Stephens</td>
<td>What the heart knows today, the head will know tomorrow</td>
</tr>
<tr>
<td>Vaughan (1979)</td>
<td>Every person has the ability to think intuitively and that intuition invariably yields truth. “Knowing without being able to explain how we know.” (p. 46) Intuitive awareness may be consciously perceived of 4 levels: physical, emotional, mental and spiritual.</td>
</tr>
</tbody>
</table>
These diverse definitions of intuition create challenges for the reader for three reasons: First, when reading literature and scholarly work about intuition, the definitions are not consistent from one study to the next. Consequently, this limits the ability to compare and contrast findings between studies.

Second, intuition is used synonymously with terms such as insight and instinct. Hogarth (2001) and Mulligan (1998) talks about the 3 In-s as being insight, intuition, and instinct. They define instinct as an inherent tendency that occurs automatically as a protective action in the face of potentially dangerous stimuli. Insight according to Hogarth is a sudden unexpected thought that solves a problem, a form of intuition, and is formed passively through vicarious experiences to which one has been subjected. According to Gilpin and Clibbon (2000) “intuition is a close sister of insight, insight perhaps being the knowledge side of the family and intuition the process side” (p. 126), whereas Fitz (1981) feels that intuition is an integral process of the mind which culminates in an act of insight. Fitz refers to a more developed form of intuition, which she calls integral insight. Garrison and Archer (2000) suggest that intuition is associated with the action side of experience whereas insight is associated with the thought side of reflection, together they are components of critical thinking. Jacques Maritain (1943), one of the most respected educational philosophers of the 20th century, wrote: “The great

<table>
<thead>
<tr>
<th>Westcott (1968)</th>
<th>Process of reaching accurate conclusions on the basis of consensually inadequate information (p.8)</th>
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<tr>
<td>Young (1987)</td>
<td>Process whereby the practitioner knows something that cannot be verbalized, that is verbalized with difficulty, or for which the source of knowledge cannot be determined (p. 52). .... Encompasses knowledge (1987, p. 60) Four levels of intuition: Mental, Spiritual, Emotional and Physical.</td>
</tr>
<tr>
<td>Zukav (2000)</td>
<td>Multisensory perception</td>
</tr>
</tbody>
</table>
thing is the awakening of the inner resources and creativity…what matters most in life is the intellectual insight or intuition” (p. 43).

Third, intuition is not to be confused with wild guessing or a characteristic specific to women, but rather a direct comprehension of a situation based on background knowledge and skill developed through previous experiences (Benner, 1984; Benner & Tanner, 1987), a spiritual connection with the patient, creativity, and the senses. Intuition is a product of tacit knowledge, is multidimensional and should take its rightful place alongside reason and rationality (Myers, 2002).

Despite the fact that intuition is difficult to define, many consider it seriously and with awe (Hogarth, 2000; Shirley & Langan-Fox, 1996). Intuition is a source of wisdom or a higher form of knowledge (Larsson, 1910, 1912) that when utilized allows one to be more successful in learning, decision-making (Watkins, 1998), and providing patient care (Assagioli, 1976; Burnard, 1989; Sublett, 1997).

**Defining Attributes and Characteristics of Intuition**

This section will discuss the defining attributes, types, levels, voices, and characteristics of intuitive individuals and will uncover how these various entities are as variegated as the definitions. Secondly, one will learn that these entities are very individualized.

*Defining attributes.* Rew (1988b) identified three defining attributes of intuition as being: a) knowledge perceived as a whole, b) immediacy of knowledge, and c) knowledge independent of linear reasoning. Knowledge presented as a whole, is a cardinal characteristic of intuition and is referred to by some as gestalt cognition (Bastick, 1982; Benner, 1984; Eason & Wilkcockson, 1996, Miller, 1989; Pyles & Stern, 1983;
Rew, 1988b, 1990; Schraeder & Fischer, 1986). The immediacy of knowledge is associated with the holistic nature of intuition. Unlike knowledge perceived cumulatively, over a span time, intuitive knowledge occurs immediately oftentimes without any prior awareness (Agyakwa, 1988; Bastick, 1982, Benner & Tanner, 1987; Cappon, 1994; Goldberg, 1983; McCormack, 1992). Rew (1988) as well as others (Morse, Miles, Clark & Doberneck, 1994) recognized that intuitive knowledge is independent of linear reasoning, and is a non-analytical thought process.

Miller (1995) found three other attributes of intuitive experiences to add to those that Rew identified based on the result of her study; 1) inner knowing; 2) sensing /feeling/perceiving; and 3) a feeling of certitude that affects perception (p. 28). Inner knowing is described as the a sense that you get deep inside yourself that something is not right or needs further investigation. You just know, without knowing how you know, is often how it is described.

A strong sense of connection between individuals was found to foster the ability to sense/feel/perceive and thus facilitated intuitive awareness. For example, in nursing, Kenny (1994), Leners (1992) and Landry (1991) found that the depth of the nurse-patient relationship was enhanced when intuition was present, thereby contributing to the excellence in nursing care. Additionally, Cooper (1994) identified that relationships of authenticity and trust were most likely to provide conditions in which intuition was found.

The feeling of certitude that affects perception guides the cognitive process and influences thought and behavior (Balthazard, 1985; Hogarth, 2001). Most writers agree that intuition is characterized by intense inner confidence in the intuitive knowing (Davis
& Davis, 2003; Hogarth, 2001). Denis (1979) when assessing adult learners found “knowing with certitude” to be a basic process of intuitive learning.

*Types of intuitive awareness.* Westcott (1968), Loye (1983) and Goldberg (1983) identified types of intuition. Westcott (1968) defined intuition as the experience of the ultimate truth, which is produced by reason. He felt there are three categories of intuition: classic intuitionism, contemporary intuitionism, and inferential intuitionism. Classic intuitionism, as defined by Westcott is a special contact with reality, true beauty, and perfect certainty. Contemporary intuitionism is an immediate comprehension of limited basic truths. Inferential intuitionism tests the immediate truths and then ultimately finds that the outcomes of intuition are practical as well as intellectual.

While Westcott (1968) was the first to view intuition as cognitive inference or unconscious inference by noting that some aspects of intuition are conscious while others are unconscious. Loye (1983) picked on what Westcott had suggested and described the types of intuition as cognitive inference, gestalt, and precognition. These types of intuition allow information to be gained about the future, detection of missing data or gaps in information, and conclusions to be drawn rapidly, almost spontaneously. Each type of intuition results in achievement of a correct conclusion with very few if any cues. Additionally, each type of intuition is associated with a different kind of time: serial, spatial, and timeless time, respectively.

Loye suggests that the first type of intuition, cognitive inference, occurs when conclusions are determined spontaneously, are not arrived at by reason and is associated with what she serial time. Hogarth (2001) describes this as “automatic information processing that occurs outside working memory of consciousness and, as such, does not
consume attention” (p.17). This type of knowledge processed is identified in the literature by terms such as unconscious, subconscious, preconscious, and subliminal (Agan, 1987; Bastick, 1982; Benner & Wrubel, 1982; Eason & Wilcockson, 1996; Leners, 1990; McCormack, 1992; Morse et al., 1994; Rew, 1986; Westcott, 1968).

The second type of intuition identified by Loye is gestalt intuition occurs when a person “detects gaps, missing pieces, or hidden relationships within patterned pressures of the whole array of perceptual information” (Loye, 1983, p. 52). The person may consider the missing information piece-by-piece or the entire thing all at once.

The third type of intuition according to Loye, is precognitive functioning. This occurs when one is able to gain information about the future directly, rather than by inference based on knowledge of past experiences. Loye posits that “time and space are collapsed into one, in some sense existing outside of, beyond, and/or before there was time and space as we know it” (p. 52).

Goldberg (1983) identified six functional types of intuition: a) discovery, b) creativity, c) evaluation, d) operation, e) prediction, and f) illumination. Discovery intuition appears as a sudden intuitive leap to understanding, ready insight or flash of knowing. It reveals singular truths or information, which later can be authenticated when, applied to specific or more general problems. Einstein and Watson evidence examples of this type of intuition. Einstein admits that he discovered the theory of relativity as a sudden flash of knowing when he was sitting in his bathtub. Watson’s discovery of the double helix structure of the DNA molecule was also associated with a sudden awareness (Goldberg, 1983).
Creative intuition is “appropriately imaginative” as it generates alternatives and other options. Goldberg states this is similar to brainstorming sessions. The best ideas or suggestions can then be selected from a list of possibilities. Often, discovery and creative intuition may overlap, however once an idea is verified as true, it is, in the strictest sense of the term discovery intuition (Goldberg, 1983).

Evaluation intuition is helpful when the final decision is made regarding the topic. This type of intuition sends a “yes” or “no” signal. Although intuition does not evaluate in the analytic sense of examining or investigating, it will help to guide the process. Evaluation intuition has an element of discrimination making “ideas feel more or less true; tentative solutions feel more or less right” (Goldberg, 1983, p. 52).

Operation intuition, sometimes referred to as luck, provides direction, guiding us one way or another. It often precedes anything specific, subtly drawing us toward this way or away from that. At time operative intuition may be more forceful, similar to the “stop/go” Do/ don’t do” quality of evaluation intuition (Goldberg, 1983, p. 54). The difference, according to Goldberg, is that evaluation intuition works when there is something specific to evaluate (Goldberg, 1983). Operation intuition is very similar to the phenomenon identified by Jung called “synchronicity,” when two events with no apparent connection become meaningful or significant to a person.

Prediction intuition makes it possible to predict future events. Predictions may be positive feelings about a future engagement or a warning device alerting us to possible danger. Goldberg (1983) states the test for prediction intuition “hinges on its precision and on whether it is likely to have been made by most people” (p. 58).
Illumination intuition, according to Goldberg (1983) has been called nirvana, cosmic consciousness, self-realization, and union with God (p. 58). Illumination intuition is the highest form of knowing and is similar to Vaughan’s spiritual level of intuitive awareness (1979). By understanding illumination intuition one may understand all forms of intuition. In addition, by nurturing illumination, this simultaneously nurtures the other five functional types of intuition by opening up intuitive channels (Goldberg, 1983).

Levels of intuitive awareness. Two authors, Vaughan (1979) and Emery (1994) characterize levels of intuitive awareness based on their research. Vaughan (1979) identified four functions or levels of intuition: a) physical, b) emotional, c) mental, and d) spiritual. The physical level of intuition arises from the body and may show itself to the individual by a gut feeling, a feeling of nausea, or hairs on the back of the neck standing up. The emotional level comes from the heart and manifests itself as an immediate feeling of like or dislike of a situation or person. The mental level comes from the mind and affords one the opportunity to see patterns in seemingly unrelated events. The spiritual level comes from the soul and provides one with a humanitarian perspective. All of these feelings prompt one to do something or think about something.

Emery (1994) added on to Vaughan’s levels by adding a fifth level, which encompasses the environment. This brings place and surroundings into the fore and reinforces that a safe, accepting environment is needed to enhance intuition. This type of environment allows one to look at the surroundings for clues and information. Other studies have also recognized this need for a safe, trusting, stress free environment (Keen, 1996; Khatri & Ng, 2000; McCutcheon & Pincombe, 2001). John (2000) suggests that an open-ended, liberal, loose, non-analytic seminar type environment is more conducive to
intuition as it allows students to put forth their ideas, beliefs, practices, emotions and feelings in a safe, open truthful way.

*Voices of intuition.* One of the most outstanding features presented from this literature review is the range of voices or channels through which intuition speaks. Whereas the rational mind speaks clearly and directly, intuition reveals itself through channels that are hazier and more indirect. Sometimes intuition is faint and fleeting, providing ambiguous flashes of understanding, and other times intuition cannot be verbally articulated at all (Claxton, 1997). Laughlin (In Davis-Floyd & Arvidson, 1997) states that intuition is developed prior to the development of language in human evolutionary history and believes that this accounts for the difficulty in verbally articulating intuitive insight.

Intuition may speak through dreams (Archambeau, 1996; Freud, 1965), myths and imaginings (Blanchard, 1993), creativity and metaphors using symbolism as its natural language. Studies show that creativity is enhanced in a state of meditation or reverie, in which imagery comes into its own. People who are able to access a state of meditation are thought to have more creative potential as well as more intuitive potential (Moss, 1991; Sinkkonen, 1991; Rockenstein, 1985).

Some intuiters describe feelings that relate to the senses by using words and phrases such as; understanding, perception, cues, seeing the big picture, tuning in, grasp, hunch, instinct, woman’s feelings, precognition, receptivity, pattern recognition, insight, illumination, a light bulb going on. Others describe the auditory aspect of intuition reflected in words such as antennae, inner voice, voice in my head and warning bells (Wall, 1998). While others describe the visceral, tactile and emotional experiences
associated with intuitive knowing by using words and phrases such as uneasiness or a
dis–ease, alertness, gut feeling, emotional, something doesn’t feel right, raw,
goosebumps, arousal, heightened alertness or consciousness, reason, inner knowledge
(Rew, 1986, 1990; Burnard, 1989). Because of these phrases it is common to describe
intuition as a ‘sixth sense’ (Burnard, 1989; Rew, 1986, 1990; Wall, 1998). Yet, when
looking at these terms and phrases, one must be cautious not confuse the term with
intuition itself.

Paying attention to these bodily sensations has been shown to be helpful in
gaining a kind of understanding that people seek when attempting to listen to others
perception” (p. 26) as he posits that there is no single way to experience intuition,
because it is experienced differently by everyone. Some people have hunches. Some get
ideas. Whereas others hear music, see pictures, smell odors, and or hear words. Zukav
states, “the five senses require you to pay attention to what is outside of you. Intuition
requires the opposite – that you pay attention to what is happening inside of you.” (p. 28).
Claxton (1997) points out that in obsessively rationalist cultures these bodily sensations
may often be missed.

Guiley (2001), Hansten and Washburn (2000) note that some people experience
intuition through a blending of the senses known as “synesthesia.” Synesthesia comes
from a Greek term that means feeling together. The most common example of this is
colored hearing in which certain sounds produce colored images or lines in the person’s
field of vision.
Characteristics of intuitive individuals. Individuals who rely on intuition have many similar characteristics, yet intuition is also considered to be very individual. These characteristics being, a holistic worldview (Agor, 1985, Campbell, 2000; Denis, 1979; Gobbi, 1998); confidence in relying on their intuition (Benner, 1982, 1984; Kelly, 1995; McCutcheon & Pincombe, 2001; Miller, 1995); experience (Bastick, 1982, Benner, 1982; Eraut, 2000; Hogarth, 2001; Miller, 1995; Schraeder & Fischer, 1987), a sense of spirituality (Bodine, 2001; Chavez, 2001; Day, 1996; Fisher, 2000; Schmidt, 1995; Sowerby, 2001), an open attitude toward others and an acceptance of nontraditional treatment modalities (Correnti, 1992).

In addition to the above characteristics, Dreyfus & Dreyfus (1985) describe pattern recognition, commonsense understanding, similarity recognition, sense of salience, skilled know-how, and deliberative rationality as six characteristics that the intuitive expert is likely to employ when making complex decisions.

1. Pattern recognition- The perceptual ability to recognize relationships without prespecifying the components of a situation.
2. Commonsense understanding- The ability to deeply grasp, the culture and language, so that flexible understanding in diverse situations is possible.
3. Similarity recognition –the ability to recognize “fuzzy” resemblance despite marked differences in the objective features of past and current situations…and sets up the conditions for recognizing dissimilarities as well.
5. Skilled know-how – The embodied knowledge that comes from practice and experience. It is the ability to perform in a manner that allows the performer and the activity to become one.

6. Deliberative rationality- Is a way to clarify one’s current perspective by considering how one’s interpretation of a situation would change if one’s perspectives were changed.

Benner and Tanner (1987) exploring the work of Dreyfus and Dreyfus, sought to identify characteristics of expert nurses by doing a qualitative study. They detected that intuitive nurses have the ability to recognize patterns and similarities in situations, have a commonsense understanding, exhibit a skilled know-how, have a sense of salience, and recognize prominent characteristics and deliberative rationality. Their study was in agreement with what was proposed by Dreyfus and Dreyfus.

Miller (1995) in doing a comprehensive review of the literature found the following characteristics of intuitive individuals. First, they acknowledge their experience of intuition in practice. Second, they trust and have confidence in their intuition. Third, they have a sense of self as skilled practitioner. Fourth, they possess clinical mastery (“an expert”). Fifth, they utilize an unconventional approach to problem solving. Sixth, they have an awareness of self-receptivity (spirituality) when interacting with others in practice, and seventh, they have an interest in the abstract nature of things (p. 308). Using these characteristics found in the literature, Miller went on to develop the Miller Intuitiveness Instrument for which validity was provided.
Summary

This section of the literature has demonstrated the diverse definitions of intuition, the types, levels and voices of intuition, as well as characteristics of intuitive individuals. Being cognizant of the fact that individuals experience intuition in a variety of ways is of utmost importance for this study. During the interview process it is necessary to be aware of the different ways intuition makes itself known to the participants and to gather the exact words that they use to describe their individual intuitive experiences.

Use of Intuition in Various Related Disciplines

Despite the adversity and the historical dissonance between intuition and rationalism, intuition has remained a central part of humans’ ways of thinking in a number of diverse contexts. Professionals are important members of our society. We rely on professionals to heal our minds and bodies, mediate altercations, provide advice in complex situations, and teach us in various contexts in our lives. When we depend on these professionals we assume they have a solid knowledge base and level of competence, as well as a repertoire of skills to meet our needs. Usually this knowledge base is derived from innate ability, interest and curiosity, pre-service preparation, education and training, and past experiences.

This section of the literature review will explore intuition in various disciplines. Regardless of the field of practice, most professionals think and respond in ways that suggest more than is explained by traditional modes of cognition. Intuition is important in relationships and communication (Gee, 1999), education (Rew, 1986, 1988; Rew & Barrow, 1989; Ruth-Sahd, 2001), organizations (Agor 1984, 1989, 1992; Davis & Davis,

Intuition in Psychology and Counseling

The first modern-day psychologist to investigate intuition was Carl Jung in the late 1920’s (Westcott, 1968). Jung’s theory of intuition was derived from his theory of personality. He felt that intuition is one of four mental functions that all human beings possess. The other three are thinking, feeling, and sensation. Jung felt that intuition, perceived immediately and unconsciously, is non-judgmental and is the perception of possibilities and principles, which are truths.

Assagioli (1974, 1976) views intuition as a psychological function that is fleeting, immediate and holistic. He also believes it is the least appreciated psychological function and therefore tends to be repressed and underdeveloped. He also felt that “only intuition gives true psychological understanding of oneself and of others” (1976, p. 220).

Field studies in organizational psychology have shown that intuition is particularly useful in crisis situations (Carlson, 1999; Khatri & Ng, 2000; Lomas, 1993; Rew, Agor, Emery, & Harper, 2000). As our world continues to get more and more complex, with high levels of uncertainty, the usual repertoire of rational problem solving is too slow and consequently is not helpful; therefore, future research in developing intuitive skills that contribute to a more holistic and integrated decision making approach is necessary.
In the field of counseling, intuition is seen as the “other way of knowing” and is recognized as a valid way of knowing. Garcia and Ford (2001) suggest that counselors take responsibility for creating a safe environment in which the client is free to reflect. They recognize that counseling takes place in a time constricted setting and therefore counselors should utilize multiple channels to gain therapeutic information about their clients.

*Intuition in Philosophy /Religion/ Spirituality*

Descartes, the founder of modern philosophy, stated that knowledge can be attained through intuition and deduction. Descartes believed that those who have intuition have attentive spirits and have no doubt about what they understand. Like Descartes, Bergson (1946) a French philosopher, believed that intuition was basic to the philosophic method and saw intuition as an internal process that provided a direct understanding of either oneself, anything, or anyone that interacted with the self. Bergson (1946) believed that intuition was a process by which knowledge was acquired and felt that if anything, philosophical intuition was the connection of the human mind with scientific fact. Bergson believed that intuition could only be used by the intellectually gifted. Bastick (1982) on the other hand, believed intuition to be a universal human ability available to all humans not just the intelligent.

Hales (2000) states that philosophers rely on rational intuition, which is the pure light of reason that shines upon necessary propositions (p. 135). He goes on to point out that throughout the history of philosophy it is the thought experiments and not the empirical ones that provide great leaps forward. Examples he provides are Plato’s cave;
Descartes’s evil genius; Rousseau’s state of nature; Goldman’s papier-mâché barns; Searle’s Chinese room; and Putman’s twin earth, none of which are empirical in nature.

The relationship between the spiritual dimension of the person and intuition has roots in the history of philosophical intuitionism. In this viewpoint, intuition is referred to as “knowledge of ultimate reality,” a “superior way of knowing truths,” and as “prime reality” (Westcott, 1968). Several authors have noted the role spirituality plays in the use of intuition. Rew (1989) states that “learning to acknowledge and trust our intuitive experiences helps us to recognize an inner source of truth that enables us to grow spiritually” (p.’56). When intuition is experienced as a sudden conviction of something, it moves one toward wholeness and harmony with all of life.

Fischer (2000) did a qualitative study looking at intuitive leadership, spirituality, and business intuition in ten business leaders. He found that several leaders believed there was a link between their spiritual religious background and their use of intuition in business.

Tisdell in her recently published book *Exploring Spirituality and Culture in Adult and Higher Education* (2003) notes that spirituality is an important part of human experience and is present in all aspects of life, including education. The way adults make meaning and construct knowledge in life and in educational settings is influenced by their spirituality. Spirituality, like intuition is about how people construct knowledge through unconscious and symbolic processes.

*Intuition in Mathematics and Physical Sciences*

*Mathematics.* The place of intuition in mathematics parallels that of science. Henri Poincaré, likely to be the best-known modern day mathematician was known to be
highly intuitive (Westcott, 1968). Poincaré believed intuition expresses itself in three ways in mathematics. It is a means of: 1) visually projecting mathematical evidence and ideas, 2) providing order to the possible mathematical equations and promoting discovery and 3) suddenly recognizing the solution with a high degree of certainty. Poincaré summed up his thoughts on intuition by saying, “It is through logic we prove; it is through intuition we discover” (quoted in Ghiselin, 1952, p. 41).

Mathematical Intuitionism, a school of thought founded on the tenet that the logic of mathematics is in the self-evident truths that are proofs in themselves. In geometry and calculus, this may explain how a student arrives at an answer suddenly and without apparent reason along with the fact that some of these proofs cannot be proven by mathematical manipulation (Bruner, 1965; Westcott, 1968).

*Physical sciences.* While many scientist believe that intuition is somewhat divorced from, if not diametrically opposed to the scientific method, others believe intuition is fundamental, and triggers the scientific inquiry and enables the scientists to generate the hypotheses that may then be explained by scientific analysis. Others such as Einstein believe it is the force that solves the investigation. Albert Einstein, for example did not come upon his basic laws of nature through rationality. Rather, he intuitively went beyond thought and then came back to rationality in order to apply in a practical way his intuitive understanding. Einstein, was believed to be an intuitive thinker, who conceived an idea, developed its mathematical soundness and then established its truth on the basis of observed phenomenon. This is the reverse of the method and it is for this reason, perhaps, that his earliest statement of his ideas met with incredulity and ridicule.
Intuition has been associated with a variety of landmark human discoveries. Jonas Salk, the inventor of the polio vaccine, said “intuition will tell the thinking mind where to look next” (Emery, 1994). Mendeleev, a chemist, in seeing the Periodic Table of Elements in its entirety and Kekule in visualizing the closed ring structure of organic compounds (Agor, 1989).

**Intuition in Business, Leadership, and Management**

*Business.* Agor (1985) in a study of over 2000 managers found that “the ability to use intuition does vary by management level, by level of government service, by sex, by occupational specialty, and to some degree by ethnic background” (p. 18). He concluded by stating that one intuition was one of the skills that top managers rely on to make important decisions. Agor later identified that intuition when coupled with the rational decision making process enhances the quality of the entire management process (1986, 1989). Agor suggested that the integration of the intuitive brain skills and more traditional leadership / management styles are required to be successful in business. He posited that the intuitive leaders/managers are not exempt from making mistakes.

Other authors emphasize an eclectic approach to decision-making (Agor, 1984, 1986, 1989; Carlson, 1999; Sauter, 1999; Sadler-Smith, 1999; Rew, 2000; Rotella et al., 2000). These authors state that both analytic reasoning or left brain, as well as right brain processes should be used together to take advantage of their obvious symbiosis. Agor (1984) identified right brain and left brain styles of management and then recommended an integrated style to management.

*Leadership and management.* Nixon (1995) did an exploratory, descriptive study to examine the decision-making process of ten first-line managers regarding their use of
intuition. Nixon found that 90 percent of the first-line managers believed they had intuition and 80 percent believed they used intuition in making management decisions. While these managers felt that intuition was extremely important and extensively used in the competitive business environment they did not want to admit that they sometimes make decisions based solely on gut feelings or intuition. Wild (1998), Keen (1996), Lank and Lank (1995) believe that intuition is a much larger force in business than most admit and feel that training is required to channel intuition by managers in the future.

Weintraub (1998), provides examples of how prevalent intuition is in multilevel corporations, such as 3M Companies, American Greetings, General Motors, General Mills, Clairol, Reebok, Quaker Oats. Weintraub found through interviewing executives in these companies that intuition was essential to making quick business decisions. Charles Merrill, the founder of Merrill Lynch brokerage firm, informed Weintraub that intuition is an essential part of his business decision-making.

Sauter (1999) recommends utilizing a decision support system (DSS) to support decision-making within a company. She feels the DSS could blend analytic tools with intuitive heuristics to enhance the managers’ insights regarding challenges and issues needing a decision to be made. Other responsibilities of the DSS would be to provide virtual experience, tracking experience, data mining and intuition to simplify analyses by utilizing filters based upon specifics, stimulating and testing of intuition, and electronic memory. Sauter states that good leaders are similar to chess players in that they learn to recognize patterns of conditions for which particular tools or strategies will most likely work.
Mangan (2000) profiled Michael Ray, a business professor at Stanford University who has been teaching a course called Creativity in Business for over a decade. This course teaches students to look inside themselves, trust their intuition, and silence the annoying voice that discourages them from taking chances. Courses such as this are being taught on the concept of creativity in the business world and students are flocking to these courses left and right.

Solovy (2000) states that, “often business leaders forget to step out on the porch.” Solovy states that business leaders are engulfed in data analysis and are besieged by competitive intelligence. Because of this, they tend to forget to verify their conclusions with good old-fashioned intuition. He posits that there are three key elements to strategic planning: the heart, which responds to the mission of the organization; the head, which participates in the analytic of strategy and planning; and lastly the gut. The gut, equivalent to going out on the porch to check the weather, directs the leaders as to the direction of the organization. When you rely on your senses, and your common sense, “you interpret what you see and feel and smell” (p. 33).

Grossman and Valiga (2000) assert that leaders need energy and vision. They argue that visionary leaders need four qualities. First, “to be able to reveal their weaknesses; second, to rely heavily on intuition to gauge the appropriate timing and course of their actions; third, tough empathy; and lastly to capitalize on their differences. They state “futurist nursing leaders are willing to use intuition in making decisions, they are comfortable with ambiguity and uncertainty, and they are creative” (p. 220). The future of nursing will demand professionals who are proficient at gathering information
Regarding trends and future prospects, anticipating events and scenarios, and intuitively considering the effects of present actions.

Gregory (2000) states that because of the culture in management, oftentimes the novice manager is left to learn on his own, by trial and error. Because they have no rules upon which to base their practice, their naïve intuition guides them. Later, this naïve intuition develops into elaborated intuition covertly. Gregory argues against the Dreyfus and Dreyfus model of professional competence and instead agrees with the model for professional competence as suggested by Clibbon and Gilpin (In Atkinson & Claxton, 2000) that places intuition on a continuum. At one end is ‘naïve intuition’ where the novice practitioner is not consciously aware that they are being intuitive and at the other end is ‘elaborated intuition’ where the expert practitioner is consciously using intuition.

Other related practice articles articulated that intuition enables leaders to overcome some of warfare’s uncertainties, and to make decisions under constrained conditions. Reinwald (2000) put it quite simply, “technological superiority alone has never won a war” (p.78). He came to these beliefs after studying the role and function of past combat leaders such as Napoleon Bonaparte, Frederick the Great and others. Leaders must learn how to distinguish the ‘voice’ of intuition, trust it, interpret its messages, and receive insights regarding challenges being faced.

Intuition in Medicine and Nursing

Medicine. Holistic, multidisciplinary and intuitive ways of knowing are reemerging from ancient times in the field of medicine and nursing. Many in these disciplines believe that medicine and nursing involve both, science and narrative, reason and intuition (Barker, 2001).
Schultz (1998), a neuropsychiatrist, scientist, and medical intuitive, supports the notion of listening to your dreams, your inner self and your bodily symptoms as a vehicle to know and learn about what your body is telling you. Recognizing the connection between body, mind, and spirit (Colditz, 2000) as well as a connection with the patient (Davis-Floyd & Davis, 1996) is important in making a good diagnosis and improving patient outcomes.

Epstein (1999), a physician, wrote an article entitled “Mindful Practice” in which he discusses the need for both tacit and explicit knowledge. While explicit knowledge is readily taught, he found this ‘book knowledge’ and clinical experience to be insufficient in his medical practice. He believes tacit knowledge, usually learned during observations and practice, includes prior experience, theories-in-action, and deeply held values, is much more helpful to him in the holistic care of his patients.

Baranski (2000) states that the intuitive-humanistic model of medicine as opposed to the scientific model of medicine allows for a doctor’s creative imagination. This creativity combined with medical experience allows the physician to formulate a sensual picture of the patients’ disease. Once this has occurred, the physician then, has the responsibility to rationally verify his or her diagnosis and treatment.

Rosenow (1999) a pulmonologist and medical physician of critical care at the Mayo clinic, presented his beliefs on the challenges of becoming a distinguished clinician. He suggested this is rooted in the clinicians ability to be consistent, use intuition, not be arrogant, have a good attitude and communication skills, have character and be caring. In a later article, he went on to state that recertifying in the ART of
medicine is what he would recommend and quoted Hippocrates as saying, “Wherever the
art of medicine is loved, There also is the love of humanity” (Rosenow, 2000).

Nursing. Until the last decade, the nursing profession has paid little attention to
the ways in which intuition contributes to clinical decision-making. Carper (1978) whose
work was largely based on the writings of Dewey (1958) and Polanyi (1964; 1967) was
the first to define intuition as a way of knowing. Carper was seeking to identify the
fundamental patterns of knowing nurses rely on. She identified four patterns of knowing:
a) empirics, the science of nursing; b) esthetics, the art of nursing; c) the component of a
personal knowledge in nursing; and d) ethics, the component of moral knowledge in
nursing. Intuition as posited by Carper is the synthesis of personal and experiential modes
of knowing with empirical, esthetic and ethical ways of knowing. Carper suggested that,
“understanding the four fundamental patterns of knowing makes possible an increased
awareness of the complexity and the diversity of nursing knowledge” (p. 21).

Many nursing theorists view nursing to be a marriage of art and science (Paterson
& Zderad, 1988; Peplau, 1988; Rogers, 1970). Peplau states that “art values subjectivity
and involvement, whereas science values objectivity and detachment” (p. 14). Rogers
believes that the art and science of nursing are both essential and that they each can
inform and nourish the other. Others (Benner, 1984; Pyles & Stern, 1983; Rew, 1986;
Ruth-Sahd, 1993, 1997; Young, 1987; Welsh & Lyons, 2001) believe that intuition not
only has a place in nursing, but is essential and occurs in daily interactions between the
patients and the nurses.

Rew (1986) stated that “nurses trust and act on intuition in a variety of situations
and settings and consequently intuition should be considered a respectable cognitive skill
characteristic of nursing science” (p. 27). Rew (2000) identifies how intuition is needed in situations where communication is ambiguous and indirect. For example, when dealing with mentally ill children and comatose patients, who cannot articulate their concerns directly. Intuitive nurses in these circumstances have the ability to help these patients communicate their concerns more readily than a nurse who relies solely only on linear problem solving.

An aspect of nursing practice that cannot be avoided is uncertainty. According to Thompson and Dowding (2001) uncertainty is a fact of life for practicing clinicians. In dealing with uncertainty they suggest three strategic approaches: rationality, bounded rationality and intuition. Intuition is more likely to occur in complex situations or situations of uncertainty, such as critical care environments, life threatening scenarios, and teaching/learning situations where one is required to “think on your feet” as defined by Schön (1983, 1987). Intuition is more likely to be helpful during these times because rational thinking is too slow and possibly insufficient. Birgerstam (2002) feels that students are being insufficiently prepared for the concrete and complex life outside the university. He notes that the complex life and work conditions and contexts with high degrees of uncertainty demand ways of knowing other than rationality.

Intuition in Nursing Education

The profession of nursing as well as nursing education is rooted in the medical model and functions from a very positivistic perspective valuing scientific and rational principles. Nursing has long been under the influence the medical model as nursing has sought to formalize and legitimize its knowledge base. Nursing education encourages linear ways of knowing and problem solving as evidenced by the nursing care plan, a
step-by-step model which has guided nursing practice for centuries and continues to
guide practice today (Ackley & Ladwig, 2002; Alligood & Toomey, 2002; Chin, 1991;
Potter & Perry, 2001). While a rationalistic doctrine is present in nursing education,
Dirkx (2001) identifies that the formal educational system itself is based very much on
rationalistic doctrine.

Despite this emphasis on the rationality, in nursing education there has been a
gradual trend toward the acceptance of non-rational ways of knowing such as intuition
experts advocate for holistic and humanistic education. Rew (1986) recommends that
intuition be taught at all levels of nursing education, basic, graduate, and continuing
education.

Encouragement of intuitive thinking skills is paramount in nursing education.
Rosanoff (1999) through qualitative analysis, found that when talking to a group of
second year nursing students about intuition she found that their intuitive side had been
active for many years, yet had been suppressed by rigorous analytic education. Once they
learned that intuitive thinking is essential to prepare professional nurses with
competencies necessary to practice within the complex world of health care, Rosanoff
could see that they were relieved, their self-esteem was expanded and they were anxious
to share their stories.

The ability to make sound clinical decisions is the cornerstone of successful
nursing practice. Recognizing this fact, nursing educators who teach intuitive as well as
analytic decision making, foster metacognitive strategies in self-awareness, create a
trusting learning environment, encourage self-evaluation, and role model diverse
decision-making strategies to students will promote the utilization of holistic decision-making and consequently enhance patient care.

Interest in the area of nursing intuition has been increasing. Nurse recruiters are not only seeking the “top” nursing students in graduation classes, but they are also asking for the “self-directed,” “intuitive,” “autonomous” and “goal-oriented” graduate. Yet despite this demand, the current nursing curricula does not prepare or educate the student in the intuitive way of knowing. Defiant of the fact that researchers have recognized intuition as a holistic method of critical thinking, intuition continues to be the missing link in nursing curricula (Rew & Barrow, 1989).

Summary

This section has attempted to evidence the perspectives of a diverse group or professionals, for example, philosophers, mathematicians and psychologists. Philosophers view intuition as a path to ultimate knowledge and truth that has a kind of mystical status. Scientists view intuition as the starting point, which initiates the scientific inquiry. Mathematicians view intuition as providing the answer to complex mathematical equations. Although they all have their own unique perspective of what intuition involves, they all recognize the role that it plays in their respected fields of practice.

Having identified that intuition is utilized in diverse practice arenas, the next section is relevant to discuss levels of practitioners and specifically for the purposes of this study, define the level of novice practitioner.
The Concept of Novice

This study investigated the meaning of intuition to novice registered nurses, therefore, this section will define the concept of novice, investigate how intuition is used by novices in practice and look at data-based studies involving intuition in novice practice.

Novice Defined

To define novice, one needs to consider the etymological definition of a word. The word novice comes from the Latin word “novicius” which means new, or fresh. The Oxford English Dictionary (1989), defines novice as a person new to a particular occupation, or activity; an inexperienced person; a beginner.

Roget’s International Thesaurus (Roget, 1995) offers the following words as synonyms for novice: amateur, abecedarian, beginner, apprentice, neophyte, learner, rookie, fledgling, greenhorn or tenderfoot.

Novice practitioners’ professional development has been studied extensively by Dreyfus and Dreyfus (1986). According to the Dreyfus & Dreyfus model of skill acquisition (1986), an apprentice goes through five stages of proficiency: novice, advanced beginner, competent, proficient and expert. Dreyfus and Dreyfus posit that there are different aspects of skill performance in these levels of proficiency. When looking at Stage 1, the novice stage of skill proficiency, Dreyfus and Dreyfus believes that the novice: learns to recognize various objective facts and features relevant to the skill; acquires rules for determining actions based upon those facts and features; is governed by context-free rules; has no experience to draw on; and consequently, is consumed with learning their new job.
Stage 2, the advanced beginner, performance improves to a marginally acceptable level only after considerable experience in coping with the real situations. The learner has coped with enough real life situations to begin to identify the recurrent meaningful aspects of the situations. They continue to require help setting priorities as they continue to operate on general guidelines (Dreyfus & Dreyfus, 1986).

Stage 3, the competent practitioner is beginning to see actions in terms of long range goals. With more experience, the competent practitioner is able to analytically examine a small set of facts that are important. At this stage they no longer merely follow rules but are able to choose a plan to organize the situation.

One who is proficient is in the fourth stage of the Dreyfus and Dreyfus model. They are now experienced and are able to view situations holistically rather than as separate aspects. At this stage the practitioner is deeply involved in the task and experiences it from a specific perspective, recognizing certain salient features. This recognition is due to the fact that they have experienced similar situations in the past and memories then trigger a plan.

The expert stage is quite different from the other stages, as the practitioner is now able to employ an intuitive grasp to the situations and no longer relies on analytical principles such as rules, maxims, or guidelines to have an understanding of the situation. Therefore the expert is one who has an intuitive grasp of the situation based on an enormous amount of experience which informs their practice (Dreyfus & Dreyfus, 1986). Dreyfus and Dreyfus suggest that while the proficient practitioner intuitively organizes and understands their tasks; it isn’t until the expert stage attained that the individual has the full intuitive ability.
The Dreyfus and Dreyfus model of skill acquisition formed the framework for the nursing research completed by Dr. Patricia Benner (1984). Benner agreed that only the expert nurse has the ability to use intuitive know how and contends that it is intuition that distinguishes human expertise from artificial intelligence. While Dreyfus and Dreyfus and Benner recognize the value of experience, they do not clarify what is meant by “experience.” The specific types of experiences associated with intuition have never been addressed in the literature.

*Expert versus Novice Use of Intuition*

While expert practitioners’ use of intuition has received considerable attention over the last 20 years, little is known about how intuition is used by novice practitioners (Eyers et al., 1992; King & Clark, 2002). This is evidenced by the fact that over 120 research studies were found that dealt with intuition in expert practitioners’ practice and only a handful dealt with the use of intuition in the novice practitioners’ practice. Potential rationales for this are first, many believe that novice practitioners do not have the ability to use intuition as they feel intuition is largely based on experience (Bastick, 1982; Benner, 1984; Dreyfus & Dreyfus, 1986; Eason & Wilcockson, 1996). Yet the notion of experience is not clearly defined in the literature. What kinds of experiences lead a person to be more intuitive has not been answered in the published studies. This is however being addressed at the present time in a collaborative quantitative study with this author and Dr. Helen Hendy. Another conundrum that is unclear, is the fact that it is possible to be an “experienced” practitioner and not practice intuitively. And it is possible to be intuitive and be a novice practitioner.
Despite those that feel intuition is experience based, others believe intuition is innate and available to all levels of practitioners (Emery, 1994; Guiley, 2001; Handy, 1999; Jones, 1983; Myers, 2002; Ruth-Sahd, 1993, 1997; Schulz, 1995; Quevedo, 1997; Weintraub, 1998). Noddings and Shore (1984) believe that intuition precedes knowledge and experience. If one believes that intuition is innate, and everyone possesses the ability to be intuitive then one must assess the use of intuition by novice practitioners in an effort to clearly understand what informs their practice and decision-making, and how to plan educational initiatives to prepare them for practice.

A second rationale is that novice practitioners utilize intuition, but do so covertly fearing the repercussions from their coworkers if they are not able to rationalize their actions, therefore they deny relying on intuition. Or they may not realize it is intuition they are using because it was not discussed in their formal educational process.

Pyles and Stern (1983) found that novice nurses would be more likely to use intuition if it was fostered, mentored and encouraged by the expert practitioner. They developed a theory of nursing gestalt that states, “nursing gestalt is a synergy of logic and intuition which involves both conceptual and sensory acts” (p.52). These researchers concluded that novice nurses could learn intuitive thinking skills via a mentoring process they labeled “The gray gorilla syndrome”. They refer to the gorilla as the role model to a group of less experienced apes. Adapting Pyles and Stern analogy for mentoring, Cooper (1997) suggests that expert nurses can teach intuition to the novice nurse through the use of clinical case examples.

A third rationale is that several researchers have equated a novice nurse with a nursing student (Brooks & Thomas, 1997; Eyres & Loustau, 1992; Gray & Smith, 1999;
McCormack, 1993; Smith, 2003) and consequently the terminology in the literature is incongruous. Student nurse and novice nurse is not the same. Moreover, it leads one to question that if the nursing student uses intuition then why can’t the novice nurse use intuition?

Similarly, Gray and Smith (1999) using grounded theory conducted a three-year longitudinal study with 17 nursing students. By evaluating journal entries they explored the impact of mentoring on students in practice. They concluded that students were able to develop intuition early in their educational process. Some students developed intuition by the end of their second year, some at the conclusion of their junior year and others did not develop intuition at all. Gray and Smith concluded by noting that the mentoring process as well as the experience gained in practice fosters intuition. Likewise in the adult education classroom, students feel more comfortable using intuition when it is encouraged and modeled by their respected educators (Royse, 2001; Torff & Sternberg, 2001).

Data-based Studies of Intuition in Novice Practice

This section will describe data-based studies that investigate intuition in novice registered nursing practice. It should be noted that studies were not included if the participant’s years of nursing experience were not defined when describing the sample. Six studies involving intuition in novice nurses were noted in the literature, two quantitative and four qualitative. See Table 2.3.

Quantitative studies involving novice nurses. A study by Lauri, Salantera, Callister, Harrisson, Kappeli and MacLeod (1998) attempted to identify decision-making models used by nurses in a variety of clinical fields and did not focus solely on intuition.
Using a quantitative approach employing Hammond’s cognitive continuum theory of decision making which combines both intuition and analysis, they sought to identify how nurses make decisions. Although this study did not look specifically at intuition, it is relevant because 16.5% of the 483 Finnish nurses were novices. Using five different models of nursing decision-making, Lauri et al., found that primarily critical care nurses used the intuitive mode of decision-making and that decision making varies according to the nature of nursing task and the context.

Similarly, Handy (1999) in completing her doctoral dissertation used the HINTS scale to determine if intuition and autonomy vary according to the nurse’s level of clinical proficiency. Her participants included nurses from all across the stages of skill proficiency from novice to expert. The findings “did not support Benner’s (1984) contention that nurses become more intuitive as they become more expert, but rather indicated that ALL nurses are intuitive” (p. 115).

*Qualitative studies involving novice nurses.* Pyles & Stern (1983) using a qualitative grounded theory approach looking at 28 neophyte critical care nurses identified that novice nurses learn about the “art of nursing” through a mentoring process called the “gray gorilla syndrome.” They also found that nurses identified a “gut feeling” that lead them to sense a change in the patients’ condition. Furthermore, they learned that nurses use intuition, past clinical experience, patient cues and basic knowledge to solve complex clinical problems.

McMurray (1992), using participant observations, individual interviews, and written retrospective accounts of clinical episodes, analyzed 37 nurses (10 novice and 27 experts) to identify characteristics and factors influencing clinical expertise in community
health nurses. McMurray found that there is a combination of factors that influence the development of expertise, namely educational, personal, and experience. McMurray concluded that expertise may be fostered by stimulating the learners perceptual as well as analytic abilities and is best achieved by providing clinical practice opportunities, demonstrations and case studies that stimulate inferential and intuitive thinking in students.

Logan & Boss (1993) completed a study in Canada, which was based on the Dreyfus and Dreyfus model of skill acquisition. Logan and Boss used ten women nurse volunteers in each of the five categories ranging from novice to expert in an effort to identify nurses’ learning patterns. They found that nurses as early as the competent stage utilized intuition.

Kirwin (1999) in completing her master’s thesis, studied 12 newly qualified nurses and found evidence that intuition was utilized when making clinical decisions. These nurses believed that intuitive awareness arose from the unconscious recognition of the patient’s subtle cues that were unrecognizable to them because of the lack of clinical experience and knowledge.

King and Clark (2002) explored 61 nurses’ clinical expertise in a surgical ward and intensive care settings in England. Although this study does not consider novice nurses, it does identify that intuition exists outside the expert domain. Using a constructivist qualitative approach their findings highlighted refinement in nurses’ use of intuitive and analytic elements of decision –making across the four identified levels of expertise as described by Benner (1984) (advanced beginner, competent, proficient, and expert). The most fluent and effective use of intuition when, making decisions was found
in the expert group. Table 2.3 displays the nursing research that identifies intuition in novice practice.

In looking over the common threads from these studies, one may see four contexts in which intuition is utilized: problem-solving, decision-making, learning and assessing situations. Additionally, the process of intuition has been described in the following terms: retrieval of information from memory, insight by connecting different areas of knowledge, recognizing familiar patterns or cues, sensing new aspects of a situation, rapidly deciding which course of action to take, a feeling of certitude and a holistic perception of what is occurring either in educational settings or in practice. Furthermore, it is evidenced in these studies that some researchers feel that these processes are

**Table 2.3 Nursing Research that Identifies Intuition in Novice Practice**

<table>
<thead>
<tr>
<th>Author / Location</th>
<th>Definition of Intuition</th>
<th>Sample</th>
<th>Research Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Handy (1999), Dissertation ~ New York University</td>
<td>Unstructured mode of reasoning and global knowledge which involves the inner nature of things without a rationale or consensus (Himaya, 1991, p. 2)</td>
<td>177 Baccalaureate female nurses (61 novice, 58 intermediate, &amp; 58 experts)</td>
<td>Quantitative</td>
<td>This study did not support the Benner model of skill acquisition as Handy found that ALL nurses were intuitive.</td>
</tr>
<tr>
<td>2) Kirwin (1999) Unpublished Masters Thesis ~ King’s college London</td>
<td>Unconscious recognition of the patients’ subtle cues.</td>
<td>12 newly qualified nurses</td>
<td>Qualitative</td>
<td>Intuition played a vital role in the decision-making process of the newly qualified, who lacked the knowledge and experience to put</td>
</tr>
<tr>
<td>Study</td>
<td>Authors</td>
<td>Country</td>
<td>Year</td>
<td>Focus of the Study</td>
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<tr>
<td>3) Lauri, Salantera, Callister, Harrison, Kappeli and Macleod (1998) Finland</td>
<td>Focus of this study was on decision-making. Intuition was not formally defined; however, the authors cited Benner and Rew who define intuition as being based on experience and creativity.</td>
<td>314 Registered nurses with varying levels of experience from 5 countries (Canada, Finland, Northern Ireland, Switzerland, and the United States) 50 (16%) of the sample were in the novice group.</td>
<td>Quantitative</td>
<td>There are different stages in decision-making that involve both systematic and intuitive decision making. Nurses with only limited experience also rely on intuition to some extent (p. 141).</td>
</tr>
<tr>
<td>4) Lauri, Salantera, Chalmers, Ekman, Kim, Kappeli, MacLeod (2001) Finland</td>
<td>Focus of this study was on decision-making. Hammond’s cognitive continuum theory of decision-making defined intuition as an individual’s opinion justified by the authority of experience.</td>
<td>236 nurses working in Geriatrics &amp; 223 nurses working in acute medical surgical areas. 71 (15%) were novice nurses.</td>
<td>Quantitative</td>
<td>Five models of decision-making were identified and represented both analytical and intuitive cognitive processes. Analytical cognitive processes were emphasized in information collection, problem definition, and planning of care. Intuitive cognitive processes were emphasized in planning implementing, and evaluating care. Intuitively oriented nurses worked in</td>
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short term acute care areas whereas analytic decision-makers worked in long term geriatric care.

<table>
<thead>
<tr>
<th>Study (Year, Location)</th>
<th>Findings/Methodology</th>
<th>Qualitative/Quantitative</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) Logan &amp; Boss, (1993) Canada</td>
<td>Intuition was noted as early as the end of the competent stage of practice and was dependent on the commitment and engagement to care. 8 nurses across levels of expertise (ranging from less than 1 year to 11 years)</td>
<td>Qualitative</td>
<td>A study of learning patterns in clinical practice. Supported the Dreyfus model as well as Benner’s seven domains. Nurse who talked about intuition were also very interested in their work, or their patients.</td>
</tr>
<tr>
<td>6) McMurray (1992) Australia</td>
<td>Sought to identify a model of expertise and therefore, intuition was not defined. Analyzed 37 community health nurses (10 novice and 27 experts). One male.</td>
<td>Qualitative Participant observations, individual interviews, and written retrospective accounts of clinical episodes.</td>
<td>Combinations of factors, influence the development of expertise, namely educational, personal, and experience. Intuition may be fostered by stimulating the learners perceptual as well as analytic abilities and is best achieved by providing clinical practice opportunities, demonstrations and case studies that stimulate inferential and intuitive thinking in students.</td>
</tr>
<tr>
<td>7) Pyles &amp; Stern (1983) Louisiana, United States</td>
<td>Gut feeling</td>
<td>28 Neophyte critical care nurses</td>
<td>Novice nurses learn about the art of nursing through a mentoring process called the “Gray</td>
</tr>
</tbody>
</table>
dependent upon previous experience and knowledge, both of which have been explicitly
developed and implicitly acquired.

Kirwin (1999) and Pyles and Stern (1983) were the only researchers that focused
solely on novice nurses. Areas that need further investigation are: the meaning of
intuition to novice nurses, clarification of how intuition is used by the novice in practice,
types of experiences, factors that bring out or inhibit the use of intuition in the novice
nurse.

Summary

The theoretical and data-based literature on intuition is both challenging and
mystifying. This review defined and conceptualized intuition, evidenced how intuition is
utilized in various disciplines including leadership and management, medicine,
psychology, religion, and nursing, provided a historical overview, and evidenced how the
concept of intuition has changed through the ages.

The body of knowledge as presented in this literature revealed five key themes.
First, it was evident that intuition does exist as a humanistic, nonrational way of
processing information. Emotion, the senses, and spirituality mediate this process. While
intuition is no longer considered to be an infallible source of truth, it is regarded as a way
of knowing, a source of guidance, and a way of seeing to gain knowledge and guide
decision making. Intuition is also regarded as something that may be taught (Hogarth, 2001; Torff & Sternberg, 2001). The debate continues in the literature as to how, when, and why does intuition exist.

Second, it was noted that some researchers believe intuition to be an innate characteristic that every human has; therefore, novice registered nurses have the ability to be intuitive. While some people are more intuitive than others, the question now becomes how to further develop intuition.

Third, intuition is used to guide decision-making and problem solving in many diverse fields of practice, including nursing. When intuition is used, it allows one to identify what is going to happen in the future, see missing pieces of information, and/or detect patterns of information that allows one to make quick decisions or take action without the use of rationality.

Finally, there is evidence that intuition is a respected way of knowing that enhances nursing care at all levels of professional practice. This study contributes to the existing body of knowledge in the fields of nursing and education by exploring the meaning and role of intuition in novice registered nurses practice. Information is gained that will impact nursing education and professional practice.
The purpose of this qualitative, phenomenological study is to examine the phenomenon of intuition from the novice registered nurse’s point of view and identify factors in practice and in education that may impact the novice nurses use of intuition. In other words, is intuition part of their practice and if so what does it look like?

The research questions that guided this study are as follows:

1) What is the meaning of intuitive knowing to novice registered nurses?

2) How does the use of intuition impact the novice nurse’s practice?

This chapter will focus on exploring the methodology used in this study. First, an overview of the design will be provided. Next, there will be a discussion of the data collection, and analysis methods. Finally, there will be a consideration of the strategies used to ensure credibility and trustworthiness of the findings.

Research Design Overview

This section will discuss an overview of the qualitative research paradigm, and specifically phenomenology as the research methodology for this study. Participant selection and ethics of confidentiality will also be discussed.

Overview of Qualitative Research

Qualitative research, also known as descriptive or naturalist inquiry, describes life experiences and how people make meaning of those experiences. By employing direct
inquiry in a conversation format, via interviews and observation, the researcher is able to gain insight into participants’ lived experience. Once the data are obtained, themes emerge which must then be reported using the participants’ words to provide rich descriptions that tell a story. Merriam (2002) states that the qualitative researchers strive to understand the meaning people have constructed about their world and their experiences. The researcher’s notes are to be the eyes, ears, and perceptual senses of the reader.

As noted in Streubert-Speziale and Carpenter (2003), qualitative researchers emphasize six significant characteristics in their research:

1) a belief in multiple realities, 2) a commitment to identifying an approach to understanding that supports the phenomenon studied, 3) a commitment to the participant’s viewpoint, 4) the conduct of inquiry in a way that limits disruption of the natural context of the phenomenon of interest, 5) acknowledged participation of the researcher in the research, and 6) the conveyance of an understanding of the phenomena by reporting in a literary style using participant commentaries (p. 15).

The belief that multiple realities exist and formulate meaning for individuals is the rudimentary belief of qualitative researchers (Streubert-Speziale & Carpenter, 2003). It is this belief that drives qualitative researchers to identify many truths rather than one basic truth. Munhall (2001) validates this by claiming that all human beings are active agents who construct their own realities. In the context of this study, “multiple realities” implies that novice registered nurses will have different perspectives and make meaning of the phenomenon of intuition in different ways.
A significant characteristic of qualitative research is that the researcher is an instrument, as it is the researcher who observes, interviews, and then interprets the data. When the stated problem is explored using a qualitative paradigm, it is necessary to address the researcher biases prior to initiating the inquiry (Streubert- Speziale & Carpenter, 2003). Additionally, Merriam (2002) notes that dealing with the researcher’s bias means clarifying the researcher’s assumptions, worldview, and theoretical orientation at the outset of the study.

To become aware of my own biases, I have spent several months at the beginning of this journey writing down my thoughts about intuition. I have also taken several courses in my doctoral studies to assist me in recognizing different worldviews, information processing, and ways of knowing and making meaning. In addition, at the outset of this study I consulted several experts on intuition in the field of nursing and education including Dr. Lynn Rew, Dr. Virginia Miller, and Dr. Patricia Benner.

When a researcher considers using a qualitative research methodology, he or she must consider his or her own assumptions and beliefs, his or her ability to accept the openness to the research form, the study design, critiques of qualitative research, the type of question, as well as rigor of this type of research.

When doing qualitative research one must “prepare to be changed” (Patton, 2002, p. 35). Looking into another person’s life events and experiences, as well as being immersed in the study, also forces the researcher to reflect on her or his own beliefs, intuitions, assumptions and preunderstandings regarding the phenomenon. The researcher may also have to “adopt a perspective of ‘unknowing’ ” (Munhall, 2001, p. 143) which allows the researcher to maintain a state of openness. Recognizing this, it was essential
that I explore my own beliefs and assumptions so as not to allow these to interfere with the interview process. The assumptions that I have as the researcher were discussed in chapter 1.

Based on the type of qualitative research used here, I was committed to the novice registered nurses' viewpoint and realized that it is their experiences that are paramount. Consequently, when conducting interviews, and assessing artifacts in this study, I became immersed in the real life stories of the participants as they were told to me. When reporting the data, it was presented in the novice nurses' voices by using direct quotes, and commentaries, to create a rich literary style story.

Qualitative researchers according to Patton (2002) are committed to discovery and understanding via an inductive analysis and creative synthesis suiting the phenomenon being studied. The researcher does not prescribe the study but instead allows the study to unfold naturally recognizing that the study may change along the way. Qualitative research is not about hypothesis testing but instead gathers data to build concepts, hypotheses or theories (Merriam, 2002). This open-ended approach allows the study to flow and myself as the researcher to be open to discovery while looking for important patterns, common themes and interrelationships that emerge from the data.

By considering these characteristics that guide qualitative research, one may see how it is descriptive, tells a story, and takes the reader into a different time and place evidencing the lived experiences of the people. Qualitative research is pragmatic and interpretive (Strauss & Corben, 1990). Through interviews, observations, and/or document analysis, the researcher understands the meaning of the phenomena from the
worldview of the participant. In addition, this type of research stimulates the reader to want to learn more about the topic and stories being discussed.

Phenomenology as a Research Methodology

While there are many types of qualitative research, the qualitative research methodology used in this study was phenomenology. Phenomenology, is both a twentieth century school of philosophy associated with Husserl (1970) and Heidegger (1931) and a type of retrospective qualitative research methodology. Husserl believed that everyday experiences are taken for granted and therefore we fail to see what is really around us. Husserl wanted to “reveal consciousness” and was concerned with the epistemological question – How do we know? Husserl’s philosophical method leads to the uncovering of the true essence of the phenomena by ‘bracketing out’ personal biases and living with the descriptions long enough for the pure meaning to surface. By doing this he felt that consciousness was purified and only the phenomena remained (Husserl, 1973).

Therefore, researchers coming from Husserl’s perspective on phenomenology attempt to answer the question: “What is the structure and essence of experience of this phenomenon for this person or group of people?” (Patton, 2002, p. 104). The assumption inherent in Husserl’s phenomenology is that “we can only know what we experience” (Patton, 2002, p. 105).

Conversely, Martin Heidegger, a colleague of Husserl’s, argues against bracketing personal feelings as he feels that they serve as the lens through which the phenomenon is viewed. Heidegger felt that nothing can be interpreted free from some perspective, therefore the first priority a researcher has is to capture the perspective of the participant and elucidate the context of the people being studied. Heidegger was most concerned
with the ontological question – \textit{What is being?} Heidegger theorized that hermeneutics was the interpretive method that allowed one to move beyond description to “discover meaning that is not immediately manifest to our intuiting, analyzing, and describing” (Cohen & Omery, 1994, p. 146). Hermeneutic researchers seek to answer the question: “What are the conditions under which a human act took place or a product was produced that makes it possible to interpret its meaning?” (Patton, 2002, p. 113)

Phenomenology, according to Heidegger, does not produce new knowledge; rather it appropriates and interprets the meanings that are already there (Parse, 2001). “Meaning is coconstituted” (Parse, 2001, p. 78); therefore, meaning is interpreted given our lived experiences, the context, and “the way in which it takes shape in our consciousness” (Spiegelberg, 1978, p. 688).

In summary, Husserl was interested in description (eidetic), whereas Heidegger was interested in interpretation (hermeneutics). These two philosophical traditions have lead to specific phenomenological research techniques; descriptive (eidetic) phenomenology and interpretive (hermeneutics) phenomenology. Descriptive (eidetic) phenomenology is linked with Husserl’s work and is directed toward describing the meaning of an experience (Giorgi, 1985). Husserl believed that common experiences lead to core meanings or essences and would be the same no matter who experienced them. The researcher then brackets him or herself out in order to eliminate interference from his or her own beliefs and values, and is now free to reflect on the experiences and describes the pure meaning of those experiences, “the thing itself” (Parse, 2001, p. 78).

Interpretive or Hermeneutical phenomenology is philosophically affiliated with the work of Heidegger. Hence it is interested in interpretation of experience and meaning
(Giorgi, 1985). This methodology attempts to make manifest what is hidden in everyday experiences. This perspective links meaning to context and consequently asks what it means to be IN the world. Researchers using a hermeneutic lens are *constructing* the “reality” on the basis of their interpretations of data with the help of participants who provided the data in the study. If other researchers had different backgrounds, used different methods, or had different purposes, they would likely develop different types of reactions, focus of different aspects of the setting, and develop somewhat different scenarios (Eichelberger, 1989, as quoted in Patton, 2002, p. 115)

As such one can only explicate the meaning of the experience from her or his own worldview and situational contexts.

The purpose of phenomenology overall is to study real life events in order to gain a deeper understanding of the nature or meaning of everyday experiences to the participants (Heidegger, 1993; Van Manen, 1990). A phenomenon being any event, circumstance, or experience that is apparent to the senses and that can be scientifically described or appraised (Patton, 2002). When studying a phenomenon, one must identify the perceptual experience in its purely subjective aspect.

Today, phenomenological research may focus on either description (Colaizzi, 1978; Husserl, 1970; Patterson & Zderad, 1988), interpretation (Heidegger, 1962; Gadamer, 1990) or both (Giorgi, 1985; van Manen, 1990). This study was most closely informed by the works of Heidegger; and therefore, utilized an interpretive approach. Interpretive phenomenology goes further than merely describing an event, and instead seeks to identify relationships and meanings that may have been otherwise concealed by
an approach that focused on description of a phenomenon. Consistent with Heidegger, I did not believe that bracketing out my personal feelings and biases were possible. Instead I believed that these beliefs provided the lens and perspective that I was coming from.

The perspective of van Manen (1992) also informed this study. van Manen states that phenomenological research is the holistic study of lived experiences using a humanistic scientific approach that incorporates the attentive practice of thoughtfulness while in search of what it means to be human. Van Manen also advocates using etymological sources and personal stories as a starting point to understand the phenomenon. Engaging the participant in phenomenological reflection, according to van Manen reveals the descriptions of what the participants’ experience and how it is that they experience what they experience.

**Participant Selection and Ethics of Confidentiality**

Qualitative research makes use of a small purposeful sample of individuals who possess certain knowledge or experiences of interest to the researcher (Merriam, 2002; Patton, 2002). Babbie (2001) contends that a purposeful sample is one that has the potential to reveal the most information about a particular phenomenon. Though there are many strategies that may be implemented for participant selection this study will utilize a criterion-based selection procedure. “The criteria are developed from the research problem, the purpose, the conceptual and operational definitions of the study variables, and the design” (Burns & Grove, 2001, p. 366). Sixteen participants were interviewed for this study and were studied in-depth.
The following criteria for participants were established for this study:

a) Novice - Nurses with less than one year of experience as a nurse were considered to be a novice according to the Dreyfus and Dreyfus model of skill acquisition (1986); b) Novice registered nurses with a cumulative grade point average of 3.0 or higher upon graduation were asked to participate in this study. This was significant in order to validate a solid knowledge base and grasp of the theoretical material learned in nursing school. They were registered nurses, which indicates that they successfully completed their National licensure examination; and c) High self-perception of intuitiveness - Participants from a previously conducted research study (Ruth-Sahd & Hendy, 2003) who had a high self-perception of intuitiveness, as evidenced by their mean score on the Miller Intuitiveness Instrument-MII (Miller, 1990) being above the mean of those tested. See Appendix C for the Miller Intuitiveness Instrument.

Consistent with the nature of qualitative research, the sample size was not completely predetermined. The process of data collection was ongoing until no new themes emerged from the interviews thereby reaching a saturation point. Patton (2002) states that “the validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational /analytical capabilities of the researcher than with sample size (p. 245). As a researcher, I sampled until redundancy or repetition of data began to emerge.

In adhering to The Pennsylvania State University Office of Research Protections, protection of the participants was accomplished in several ways. First, an informed consent form was administered, explained and signed prior to engaging in the study. See
Appendix E. One copy was retained as part of the research records and the participant retained the second copy. While consent forms are necessary, due to the nature of the interview and not knowing what exactly was going to transpire, it was impossible to do a specific informed consent. Instead the participant was informed of the nature of the investigation and was reassured that his or her privacy will be maintained when reporting the findings, and all the results will be kept confidential. Each participant was given a pseudonym or selected one for him or herself. Second, the participant was informed that they have the right to withdrawal from the study at any time without any penalty. And lastly, all procedures were carried out in accordance with the institutional review process.

Data Collection and Analysis Methods

When performing qualitative research the procedure for data collection must be carefully planned so the researcher gains the most pertinent information from the participant. While there are many techniques to gather data in qualitative research, such as interviews, participant observation, document analysis, among others, this study primarily used in depth interviews. Documents and other participant artifacts, for example photographs, were used as secondary sources of information.

The purposeful sample for this study was derived from a group of novice registered nurses who scored above the mean on the Miller Intuitiveness Instrument-MII (Miller, 1990) and agreed to participate in a qualitative study. These nurses were part of a stratified random sample that was involved in a previous quantitative study I did in collaboration with Dr. Helen Hendy in the spring of 2003. The MII measures self-perception of intuitiveness. In addition to the MII score, the participants in this study were excellent student nurses as evidenced by their graduating grade point average being
greater than 3.0, had less than 1 year of clinical experience as a registered nurse and be between the ages of 18 and 27.

**In-depth Interviews**

The primary method of data collection for this study was through two in-depth, face-to-face individual interviews. Its purpose as stated by Patton (2002) allows “us to enter into the other person’s perspective. Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit” (p. 341).

There are three types of interviews used in qualitative research – structured, semi-structured, and unstructured (Streubert-Speziale & Carpenter, 2003). This study used semi-structured interview questions based on an interview guide. See Appendix A Interview Guide. Patton (2002) notes the strengths and weaknesses of using an interview guide. The strengths are that the guide makes certain the interviewer has carefully decided how best to use the limited time available during the interview and helps to make the interview more systematic and comprehensive by delineating in advance the issues to be explored. Additionally, an interview guide helps to keep the interview focused. Weaknesses of the guide are that the sequencing of the questions may not be the way the interview occurs, and consequently topics may be omitted.

In recognizing these weaknesses, as stated above, this study utilized an interview guide with in-depth semi-structure questions in order to focus on key areas yet allow for flexibility during the interview process. Participants were asked to talk about their experiences of intuition in nursing and were asked to answer some open-ended questions,
yet the order in which these questions were answered was not important.

Phenomenological questions are designed to “peel away layers of experience in an effort to define all of the elements of that experience” (D. Flannery, personal communication, January 15, 2002). The participant had control over the interview and flexibility was permitted where needed. Additionally, follow-up questions were asked dependent upon what the participants shared in their stories.

A primary interview was completed with each participant lasting approximately 1 ½ - 2 hours, and was later transcribed. The transcript from this interview was then mailed or hand delivered to the participant for them to look over, verify and comment on. A second follow up interview was then scheduled with each participant. This interview provided a way to clarify information obtained during the initial interview and discuss the transcript, address any questions or concerns that the participant had since the time of the initial interview, and identify if the participants wanted to share any other additional information. Another advantage to doing a second interview was that as themes started to emerge from the transcripts, these were then addressed and clarified. Additionally, participants were informed that they may call or email me at any time during the progression of this research. A few of the second interviews were conducted via telephone calls and emails. In these cases, the participants mailed back the original transcript with their attached comments.

When conducting the interviews using a hermeneutic phenomenological perspective, I recognized my own perspective and attempted to make this explicit to the reader. Phenomenologists recognize the human connection that the researcher and the
participants develop as they talk about the lived experience under investigation (Patton, 2002). Therefore, when performing the interviews for this study, I joined in a reflective discussion with the participant on the phenomenon under investigation. My thoughts, feelings and personal stories were included in the interview if they fit in with the discussion, though this was kept to a minimum as I was mainly interested in the participant’s perspective. Thus, any comments I made were intended to make the conversation as natural as possible to get at how the participant makes meaning of intuition. As the researcher, I was an integral part of the study.

Data collection within this study was done in a mutually respectful manner, while focusing on the participant’s meanings and experiences. According to Babbie (2001) understanding how the meaning-making evolves during the interview is as crucial as determining what to ask. Therefore meticulous attention was paid to the interview process, as well as the content, during data collection.

Documents and Artifacts

Documents and artifacts such as drawings, pictures, personal diaries, written papers from nursing school, photographs, songs, written records that the novice nurse has kept, or any other visual aids that represent intuition to the novice nurse were utilized as additional data sources in this study. These documents assisted the novice nurse to articulate her/his meaning of intuition as some intuitive insights may not be able to be articulated verbally (Rew, 2000). Participants were informed that they may bring these documents to the first interview, send them to me in between interviews, or bring them to the second follow up interview, if they would like. These documents were helpful in assisting the novice nurse to make meaning of her/his experience with intuition in their
practice, and provided another means of expressing what intuition is for them, through image, symbol, song or photograph, as well as the verbal explanation of how it connects to intuition.

These documents and artifacts were used as a secondary source of data for this study. Merriam (2002) as well as others (Dereshiwsky, 1999; Patton, 2002) note the strength in using documents as a data source lies within the fact that, they already exist in the situation and have meaning to the participant. Furthermore, these documents and artifacts did not intrude upon or alter the setting in which the interview is taking place in ways that the presence of the investigator might. These documents and artifacts were brought to the interview and discussed by the participant, they were not drawn or developed within the actual interview itself.

Data Analysis

Data analysis in qualitative research occurs simultaneously with data collection (Merriam, 2002). After receiving permission from the participants, all interviews were audio recorded assuring that the identities of the participants were protected. These tapes were then transcribed. Using an inductive analysis and a constant comparative method of data analysis, key themes that emerged from the interviews were identified (Patton, 2002). My advisor was kept informed of the findings as the study unfolded and had access to all data, tapes, tools and transcripts for feedback as well as to avoid potential investigator bias.

During and immediately following each interview, analytic memos were collected. These notes reflected how I felt during the interview, the atmosphere of the interview, the participants’ interest in the study, whether questions seemed to resonate
with the particular participant or not. Further analytic memos identified body language and facial expressions as exhibited by the participant. Journal entries were noted as far as how I felt during the individual interviews and how I felt I was changing during the research process.

Marshall and Rossman (1999) argue that there are typical analytic phases integral to qualitative data analysis that fall into six phases. These six phases include organizing the data; generating categories, themes, and patterns; coding the data; testing the emergent understandings; searching for alternate explanations; and writing the report. All of the phases involve data reduction so the collected data may be organized into more “manageable chunks” (p. 152). Organizing the data involves reading and rereading the data to allow the researcher to become “familiar with the data in intimate ways” (Marshall & Rossman, 1999, p. 153). It is during this phase that the researcher may also want to enter the data into a computer software program in an effort to make sense of the voluminous amounts collected.

The phase in which the researcher generates categories, themes, and patterns can be the most difficult and ambiguous; yet, on the other hand, it can be creative and fun (Marshall & Rossman, 1999). Marshall and Rossman state that the analytic process demands,

- a heightened awareness of the data, a focused attention to those data, and an openness to the subtle, tacit undercurrents of social life. Identifying salient themes, recurring ideas or language, and patterns of belief that link people and settings together is the most intellectually challenging phase of data analysis and one that can integrate the entire endeavor (1999, p. 154).
As the categories emerge, the researcher searches for those that have internal convergence and external divergence (Guba, 1978). Therefore the categories must be internally consistent yet different from one another. Patton (2002) describes the process of inductive analysis where the salient categories emerge from the data.

Once the categories emerge, as common threads from several participants, the data is then coded using abbreviations of key words, colored dots, numbers etc. The researcher is responsible for developing a system that makes sense to him or her. This phase is also necessary if a computer software program is used for data analysis.

When testing the emergent understandings the researcher begins the process of evaluating whether the categories and themes are reasonable. The researcher, at this point, challenges and questions the themes to determine if they are useful and central to the area being researched. The researcher also must be certain that the story that is unfolding is from those being researched, the participants.

Searching for alternate explanations is something that the researcher should do in order to “critically challenge the very patterns that seem so apparent” (Marshall & Rossman, 1999, p. 157). Marshall and Rossman state that alternative explanations always exist and therefore the researcher must identify them, describe them and make clear how the explanation offered is the most plausible.

The final analytic phase involves writing the report and should not be separated from analyzing the data. Marshall and Rossman (1999) believe that when, the researcher writes, she or he is engaging in the interpretive act.

Within this study, data analysis attended to the phases of data analysis put forth by Marshall and Rossman by utilizing the following data analysis procedures. When
reading the transcripts color-coded key words were highlighted and marked. When
organizing the data, I read and reread the interviews to intimately become involved with
them noting the color-coded key aspects on a poster for rapid visualization. I had a
second follow up interview with the participants so they could validate my interpretations
and organization of the data. Researcher interview notes, reflections and observations
relative to each novice nurse were examined as a unit in relation to the text. This
provided a holistic view of each novice nurse and allowed for an understanding of each
participant’s unique story.

When coding the data I labeled all of the text to allow referral back to each
individual novice nurse. The coding phase allowed for the assembling of similar themes
within each novice nurse’s story. By doing this, areas of incomplete or inadequate data
were made obvious. These incomplete and inadequate data areas were then clarified
during the second interview or via email with the participants. This coding process was
again completed after the second interviews.

When testing the emergent understandings, the data was evaluated for its
usefulness and meaningfulness. As a researcher, in order to make meaning of these
novice nurse stories, it was essential that I understand and explore the context out of
which these stories and meanings emerged. On evaluation of the data, alternate
explanations for the findings were appraised and verified according to outside nursing
sources and maintaining an open mind to look at all possible explanations. I attempted to
critically challenge the obvious and sought to identify factors that were not so obvious.
Expert assistance from my dissertation chair as well as from within the field of nursing
education was also used.
When engaging in the final phase of data analysis, writing the report and making sense of the data on paper, I sought to present the findings as clearly as possible recognizing that the written report is the primary means of reporting the research results (Marshall & Rossman, 1999).

Credibility and Trustworthiness

In qualitative research, it is the rich, thick descriptions, in the exact words of the participants that persuade the reader of the trustworthiness or rigor of the findings. Merriam (2002) states that there is a tension between having the right amount of supporting data versus analysis and interpretation that enhances a study’s credibility and trustworthiness. This section will describe operational techniques supporting the rigor of qualitative work as described by Guba and Lincoln (1994): credibility as internal validity, dependability as reliability, and the potential for transferability to other settings.

*Credibility as Internal Validity*

Credibility as defined by Patton (2002) is equivalent to the internal validity of the study. Lincoln and Guba (1985) believe that credibility includes activities that increase the probability that believable findings will be produced. One of the best ways to establish credibility is through prolonged engagement with the subject matter. Another way to confirm credibility of findings is to see whether the participants recognize the findings to be true to their experiences. Lincoln and Guba have called this activity of validation “member checks” (p. 314).

Streubert-Speziale and Carpenter (2003) believe that credibility addresses questions such as, Do the findings of the study make sense? Are they credible to the people studied and to our readers? Do we have an authentic portrait of what we are
looking at? Several measures to ensure credibility are: (a) use rigorous methods in the field by prolonged engagement in the field by the researcher, (b) the researcher must be credible and have a philosophical belief in the value of qualitative inquiry, (c) verify that the participants recognize the findings to be true by seeking validation from the participants (Streubert-Speziale & Carpenter, 2003). Another way to ensure credibility is for the researcher to identify factors that may positively or negatively affect the study. This may be accomplished by examining biases and being in tune to the changes that one goes through as a researcher during the research process. This study used the following measures to ensure credibility: prolonged engagement, investigator consultation, data triangulation, and member checks.

Prolonged engagement means that the researcher has spent enough time in the field to learn the culture and to build trust among the participants (Patton, 2002). As a nursing faculty member at a college I have an understanding of the educational process of the novice nurse and have a degree of visibility and reputation among the novice nurses. This knowledge of the environment and the level of trust already established with some of these novice nurses increased the likelihood that they provided honest information. My persistent observation of novice nurses in the educational and clinical setting afforded me insight and wisdom about this group of nurses. It was from these interactions and observations that this study emerged. Patton (2002) states that by observing “the inquirer is better able to understand and capture the context within which people interact” (p.262). My daily contact and frequent discussions with novice nurses initially led me to question the effect that intuition has in their practice.
Triangulation is a strategy that researchers may use to ensure the internal validity of the study. Merriam (2002) notes four ways to triangulate as being: multiple investigators, multiple theories, multiple sources of data and multiple methods to confirm emerging themes. Within this study, data triangulation was used. Data triangulation involves comparing and cross checking between different data sources within the same study (Patton, 2002). For example, this study used verbal interviews as well as other data sources such as drawings and pictures, etc. that the participants were willing to share. The use of props in the form of drawings, music, or metaphors provided me with another way to hear the data and provided the novice nurses with an alternative way to express themselves.

Member checks were implemented after the initial interview as well as after the final follow-up interview. This allowed the participant the opportunity to verify information provided in each interview and expand on any issues that they felt were necessary. Additionally, the participants recognized the findings to be true to their stories. Another way to enhance the authenticity of an interview is by asking the same question in two different ways and at different times during the interview to identify if the participant gives the same response.

In keeping with the phenomenological approach, the novice nurses were asked to review their transcripts as well as the thematic analysis as a way to validate the findings. The novice nurse participants were asked the following questions: Do you feel the themes accurately reflect your story? as well as, Have I included what is relevant to you?
Dependability as Reliability

Lincoln and Guba (1985) use the term dependability, as being parallel to reliability in quantitative research. Dependability is a criterion met once the researcher has determined the credibility of the findings. Reliability is based on the appropriateness of the methods and techniques and also refers to the extent to which the research findings are consistent and can be replicated. Dependability is determined once the researcher asks, How reliable are the results? Lincoln and Guba (1985) state that there can be no dependability without credibility as they are both interrelated.

Lincoln and Guba (1985) suggest keeping an accurate and meticulous audit trail, as a method to ensure dependability. An audit trail describes in detail how the researcher collected data, how decisions were made during the research process, reflections, feelings and notes of the researcher as well as a description of how data were analyzed and what themes emerged. This authenticates the findings of the study by following the trail of the researcher (Merriam, 2002).

Transferability and Relevance to Other Settings

Transferability, parallel to external validity or fittingness, refers to the likelihood that the findings have meaning to others in similar situations while still preserving the particularized meaning, interpretations, and inferences from the initial study (Lincoln & Guba, 2000; Merriam, 2002; Patton, 2002; Trochim, 1999). Qualitative findings only have meaning within the given situation or context they are not meant to be generalizable (Merriam, 2002). Therefore, as in all qualitative research, the results of this study are not intended to be generalizable (Burns & Grove, 2001), but rather are intended to represent this particular group of novice registered nurses in depth. As many qualitative researchers
note (Merriam, 2002; Trochim, 1999), the notion of transferability does not fall on the researchers’ shoulders, but rather, on the person doing the transferring.

Summary

Every study has limitations, this being a qualitative study, utilizing a small sample size generated findings that are not transferable to other settings; yet, makes significant contributions to the field of nursing and to nursing education. By learning the meaning of intuition to these novice nurses, one may identify how intuition informs their decision-making processes and practice. By learning that intuition does inform their practice the nursing educator will see that this way of information processing is relevant to include, recognize, and embrace in nursing education as educators will learn that intuition is not only privy to the expert nurse.

This chapter examined the qualitative research, major tenets of phenomenology as a research perspective, and participant selection criteria. Other issues presented in this chapter were specifics concerning data collection and analysis methods. Lastly, this chapter discussed in detail the measures that were taken to ensure accurate, credible and dependable findings.
CHAPTER 4

INTRODUCTION OF THE PARTICIPANTS

This chapter will introduce the sixteen novice nurses who participated in this study. The depth of these profiles are necessary because many of the participants expressed that their past experiences and family background set the context for who they are today and, most importantly, inform their meaning of intuition. Each participant had a unique personal story to relate to the interviewer. These personal accounts are included as a preface to the research results. Pseudonyms have been used in place of the participants’ real names in order to ensure confidentiality and protect their identities. The participants will be presented in alphabetical order for ease in referring back to them when reading the following chapters.

Profiles of the Participants

The sixteen novice registered nurse participants in this study were all Euro-American, with the exception of one Latina woman. All sixteen participants were between the ages of 21 and 27 years of age. The mean age of the novice registered nurses was 24.4 years. The study included four men and 12 women. All of the participants were identified in a previous quantitative study conducted by Dr. Helen Hendy and myself (Ruth-Sahd & Hendy, 2003) to have a high self-perception of intuitiveness as measured by the Miller Intuitiveness Instrument (MII) (Miller, 1990). The mean score on the MII in the previous study involving 314 participants was 184. These participants had scores
between 185 and 232. The participants represented a wide range of clinical areas including pediatric oncology / hematology, critical care, emergency, women and babies, psychiatric as well as medical -surgical nursing. Amount of experience ranged from 2 to 12 months. Several of the participants were from working class backgrounds. Additionally, religious backgrounds varied, including several based upon fundamental beliefs. (See the participant table).

The response to participating in the study by these participants, despite the challenges of juggling new work schedules, taking critical care courses, planning weddings, or balancing family life and work, was very positive. One participant agreed to quickly schedule our interview before she was to leave for California to meet with her fiancé who has been in Kuwait for almost one year. I was amazed at their willingness to interrupt their schedules and make time for a lengthy interview when they had so little time to spare. I believe their willingness to participate and speak with me validates their commitment to the concept of intuition in their nursing practice and their life.

Adam

At his suggestion, Adam and I met at a local bookstore coffee shop. Adam, a 27-year-old white male had recently been discharged from the hospital himself after being admitted for abdominal pain. He was hospitalized for a week and was relieved to report that he had a negative work up. He looked tired but was willing to keep his commitment to complete this interview.
Table 4.1 Participants

<table>
<thead>
<tr>
<th>Participant “Name”</th>
<th>Mo. on the job</th>
<th>Gender</th>
<th>Age</th>
<th>Ethnic / Racial I.D.</th>
<th>Score on the MII</th>
<th>Hospital Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adam</td>
<td>6</td>
<td>M</td>
<td>27</td>
<td>Euro-American</td>
<td>185</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>[Pennsylvania]</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Allison</td>
<td>11</td>
<td>F</td>
<td>24</td>
<td>Euro-American</td>
<td>188</td>
<td>Pediatrics Hematology/Oncology</td>
</tr>
<tr>
<td>[Pennsylvania]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Austin</td>
<td>10</td>
<td>M</td>
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* Phone Interview
[ ] State in which they are currently employed.
Adam has been employed as a registered nurse in the emergency department (ED) for 6 months and primarily works night shift. While attending nursing school Adam worked in the ED as a nurses aid. He feels that this experience has helped him to gain more of a perspective as to what emergency care entails as well as gave him some foundational background for nursing school.

In addition, he feels this experience in the ED has given him the experience needed to be more intuitive as he feels intuition is derived from experience.

Adam has a twin brother and five older sisters. He presently lives with his brother and states that his family is now and has always been very close, although he was quick to point out some advantages and disadvantages of growing up with five older sisters. Adam enjoys golf and lifting weights in his spare time. He denies being particularly spiritual or religious.

Allison

Allison willingly agreed to meet me half way between our two locations. As we sat in my car and carried out the interview, I learned that Allison was getting ready to leave for California to see her fiancé whom she has not seen since February. He is in the Marine Corp and has been deployed to Kuwait. Allison is a 24-year-old white female who is the oldest of three girls. Her parents divorced when she was in her last year of high school and have both remarried. Allison enjoys spending time with her sisters, stepsisters and stepbrother.

Allison has been a nurse for 11 months and works at a large university hospital on the Pediatric – Hematology / Oncology unit. She works four weeks of day shift 7 a.m. to
7 p.m. and then four weeks of night shift 7 p.m. to 7 a.m. Allison completed a summer nursing externship between her junior and senior year of nursing school which afforded her the opportunity to see what nursing is like first hand. Additionally, Allison worked as a patient care assistant during her nursing education. Both of these experiences, according to Allison, provided her with increased experience from which she has gained intuition.

In her spare time Allison enjoys ballet dancing and singing. She was quick to say that most of all, she really enjoys spending time with her new little 4-month-old half sister. She feels that spending time with kids helps her to be more intuitive because “when you are with kids you have to learn to pick up on their nonverbal communication and listen to their types of cries.”

Allison is Lutheran and attends church weekly. She states that she participates in daily prayer and feels that her religious beliefs are what lie behind her whole approach to life as well as informs her nursing practice and her intuitive knowledge.

Austin

Austin and I mutually agreed to meet at one of his favorite restaurants that happened to be three miles from his home and also happened to be one of my favorite restaurants as well. Austin initially had answered my interview questions over email because we were not sure we were going to be able to meet in person. This interview was a continuation of that email.

Austin is a 21-year-old single, white male who describes himself as being open minded. Austin’s parents separated when he was in fifth grade. He recalls the year prior to their separation that “he could sense that things were not going quite right and things
were falling apart.” Austin remembers being very angry at his father and losing touch with him for about five years during this time. Consequently, Austin was and still is very close to his mother. It wasn’t until his high school years that his “father came back into the picture and came to his sporting events.” Both parents remarried and he “has lots of step siblings.” He has a younger sister who is going into nursing school. Austin’s mother has worked with mentally and physically challenged fifth grade students for years and Austin recalls enjoying stories related to her day at work, which he feels, could have contributed to him going into nursing school and explain his high self perception of intuitiveness.

Austin is presently working in a large inner city emergency department on night shift. He was attracted to emergency nursing because he enjoys the fast paced atmosphere and the collaborative relationship between the doctors and the other members of the health care team. Even though Austin is the new kid on the block, Austin looks forward to his job because he enjoys his coworkers and the “collaborative, trusting relationship” that they have. This trusting relationship he feels contributes to his ability to act on his intuition.

In his spare time Austin likes to “run, mountain bike, go dancing, and just enjoy the outdoors.” Recently he told me about how he and his friends renovated an old school bus and traveled cross-country to California.

Diane

Diane agreed that since it was a beautiful day in July we could meet at a local park and sit at a picnic table to carry out the interview. As we spoke Diane was not
distracted by the site of the ducks that waddled by or the train that rattled past; instead she remained focused and was very willing to share her experiences, both private and those related to her psychiatric nursing practice.

Diane is a 22-year-old white female who is the oldest of three in her family. She has a younger brother and a younger sister. Diane has three aunts who are nurses in three different specialty areas of nursing: cardiac, maternity and medical / surgical nursing. She remembers growing up especially enjoying the nursing stories that these aunts would tell and credits them for her going into nursing.

Diane spoke very openly and honestly about her family’s history of psychiatric illness. Diane’s mother suffers from anxiety and a panic disorder, her brother has depression, her sister also has a panic disorder and her father has seasonal affective disorder. Diane herself also has struggled with anxiety and depression in the past and has needed to be on medication. Diane feels that these family experiences as well as dealing with similar situations with friends have not only guided her into psychiatric nursing but have also “brightened her intuitiveness” in working with psychiatric patients. She states she is able “to detect others’ nonverbal cues and relate to them, having experienced some of the same illnesses experience.” Diane decided to go into mental health nursing as an attempt to make a positive impact and correct the negative societal stigma that she witnesses in relation to mental illness. Another experience she feels aids her intuitiveness is her experience as a camp counselor for mentally retarded children. In this job she was forced to detect their nonverbal communication if she wanted to connect with the children.
Diane reported that she is Mennonite, which is an Anabaptist group. She explained this to be a rather radical form of religion that originated in Switzerland during the Reformation in the 1600’s. Diane states the Anabaptists do not believe in infant baptism, taking oaths, holding public office and participating in military service. She feels that she is “on the fence” with some of these beliefs and feels it is “almost like a culture that she grew up in rather than her beliefs.” Diane has attended a Christian school her entire life and attributes her upbringing and faith in God for her faith based definition of intuition.

Emma describes herself as an extrovert, outgoing, and a people person. She also considers herself to be open-minded. Emma is 23 years old and enjoys playing the clarinet. She loves music, which she finds relaxing. She also enjoys Creative Memories scrapbooking and “hanging out with her friends.” Her enthusiasm and love of nursing was evident in her tone of voice and was clearly reflected in many of her statements such as “I enjoy nursing,” and “I enjoy helping a person by constructively doing something for them or helping them to die comfortably and with dignity.” Emma believes nurses are “especially privileged to be able to take care of people.” She feels that her love for nursing as well as her ability to connect with people informs her intuitive decision-making.

Emma grew up in a Christian home and has attended Christian school throughout her entire education including college. Their beliefs are based on the Reformed church of America a mainline Protestant denomination. Emma’s older brother is presently in his
residency to become an otolaryngologist. Her sister is two years younger and is attending college at this time. Emma also has a “core group of girlfriends that are very special to her.” Her best friend is her second cousin. Emma states they are “almost like twins because they have lots of intuitive hunches about each other.” They have been friends ever since they were 13 years old when they attended band camp together. They then went to nursing school together and are now working on adjoining floors at the same hospital.

Emma’s father is a pharmacist and her mother is a licensed practical nurse (LPN). In addition to these professions they own a Christian bookstore. Her mother has not worked as a nurse recently and instead has been employed as a teacher’s aid in preschool. Emma feels that working at her father’s pharmacy since high school has helped her with nursing school in that she had a better grasp of medications and is better able to relate to people. Other jobs that helped Emma to relate to people were a receptionist position at Bethany Christian Service’s adoption agency and at her college. She has also worked at a nursing home as a nursing assistant between her junior and senior year of nursing school. Emma feels that “knowing how to relate to people is a big part of intuition.” Other ways that her intuition has been informed is through talking to her dad and her brother who have been in health care for a long time.

Presently, Emma is working on a Medical –Surgical Nursing floor which includes patients on cardiac monitors. She has been working there for 9 months on the 7 p.m. to 7 a.m. shift.
Ethan

Ethan is a 27-year-old white male who has been practicing nursing for a year in a Midwest state. Throughout our interview Ethan evidenced a positive focused attitude and a genuine willingness to share his thoughts and feelings. He enjoys reading nursing journals and doing black and white photography. He is presently studying for his critical care registered nurse exam, which he plans to take within the next year. Presently Ethan is working on a medical intensive care unit from 7 p.m. to 7 a.m.

Ethan has a twin sister who is 13 minutes older than he is. His twin is presently a barber, but will be changing careers to become a nurse. Ethan’s parents divorced when he and his sister were 2 years old and his mother never remarried after the divorce. His father, on the other hand, is a retired barber and is presently on his 5th marriage. His mother is a nurse and he credits her for his choosing nursing and for his intuitiveness. Ethan is very close to his mother and states she “always seemed to have an intuitive grasp of what was going on.” When Ethan was 16 years old he went to work with his mother for the day in the operating room. This experience broadened his television image of nursing and he decided at this point that he wanted to be a nurse. During this experience he also noticed that there were men in nursing which is not something that he was exposed to on TV. Ethan stated he wanted to be a nurse, in order to treat patients in a positive manner and be their advocate.

Ethan grew up in the Nazarene church which he states is a branch of the Methodist church. While Ethan does not regularly follow the beliefs of this church, he spends time praying daily and feels that his religious beliefs are what really lie behind his whole approach to life and nursing. Ethan does pray with patients and notes prayer is
especially important to do with patients if they request it and if they are close to death. Ethan’s spirituality, which he sees as being very different from organized religion, is most important to him at this point in his life. He practices yoga, Tai Chi and meditation (when he gets a chance) to help him relax and connect with his inner self as a way to find inner peace. Additionally, Ethan was also very proud to tell me about the fact that he is Master Mason, which is part of the Masonic Lodge.

Helen

Helen and I met at a private dining room in the hospital in which she is employed. She agreed to meet with me just prior to one of her shifts. Helen has been working since her graduation twelve months ago in the Intensive Care Unit of a large city hospital. Helen openly shared much with me and was very gracious in revealing many family circumstances that caused her difficulty. She shared these experiences because she feels that these experiences have lead her into nursing and have positively impacted her practice as well as her intuitive ability.

Helen, is a 27-year-old divorced Latina woman with a 10 year-old daughter. Helen grew up in Florida, was married at the age of 17 and moved to Hawaii to be with her husband who was in the Navy at the time. They remained married for 1-½ years and then divorced. At this time Helen moved back to the mainland to be with her family. Helen is the fourth of five children. Her parents were both previously married and the three older siblings are from her father’s first marriage. Helen’s father, a carpenter/renovator, died twelve years ago from complications of myasthenia gravis and leukemia. Helen recalls that, at the time of her father’s diagnosis, there wasn’t much known about
these diseases. Oftentimes she would go to the library to look up information so she could inform her family and help them make decisions regarding his care.

Helen’s father, although he did not graduate from high school, was one of the smartest people that Helen knows. She remembers him reading extensively, mostly about history. Helen’s mother worked at a hospital kitchen and later worked in the hospital housekeeping department for a number of years. Currently, her mother is the office manager in a family health clinic. Helen states that she had to grow up “very quickly” and believes this was due to the fact that her “father was addicted to alcohol and drugs” and she “lived in a home where there was physical, verbal and sexual abuse going on.” Helen shared that she was sexually abused at a very young age. Because of these circumstances in her life, at the age of 15, Helen attempted suicide and was placed in a psychiatric hospital. During this hospitalization Helen recalls meeting another patient who she felt very intuitive about. She explained that she knew this was girl was not telling the doctors and nurses the “entire story”. When Helen talked to this girl alone she asked her what is really going on? The girl then opened up and told Helen that she had been sexually abused and that her parents were using drugs. She felt that if she told the health care providers this information they would take her away from her family.

Another significant issue that impacts Helen today is the fact that her father was a Cuban. As a result of this she described the racist and discriminatory comments that she was subjected to based upon her nationality. Helen believes all of her life experiences have shaped who she is today and have lead her to be “more tolerant and less judgmental of others.” Helen has been a counselor to alcoholics as well as to people with sexually transmitted diseases and AIDS. Another experience that Helen believes to be significant
is the fact that her best friend is a cocaine addict. Helen was happy to report that her 
friend has been clean for three years but was quick to mention that she realizes that once 
a person is an addict, they are always an addict.

Helen describes herself as being “persistent” and confirms that others perceive her 
to be that way as well. She feels that “you have to be your own advocate, and that no one 
else will stick up for you, so you have to stick up for yourself.” Based on her experiences 
she feels that she “is able to care for patients in a non-judgmental holistic manner.” Helen 
teaches her daughter to be “non-judgmental.” She informs her daughter that she will 
“always come across people and you cannot judge them, as everyone has their own life 
experiences, and until you walked in their shoes, you don’t know what they have gone 
through. Instead you must listen and care and let them know they are not alone.” I asked 
Helen if she shares these thoughts with her patients. She stated, “these beliefs guide my 
life and when it is pertinent to my patient’s care I will often share my past experiences 
with them as a way to foster a connection and hopefully enhance my patient relationship. 
By doing this I feel it informs my intuitiveness.”

Jordan

Jordan is a 23-year-old male who presently is working on a medical / surgical 
orthopedic trauma floor in a major trauma center in a Midwestern state. He has been 
employed as a RN for 12 months, has worked 11 a.m. to 11 p.m., and now is working 7 
am. to 7 p.m. While attending college, Jordan completed a double major in nursing and 
political science AND a minor in business! He is currently embarking on a master’s
degree in public administration for health care. This truly evidences his motivation and love for learning.

When Jordan is not working, studying or taking classes he enjoys fixing up the home that he and his wife recently purchased. Jordan is a newlywed and was married 6 weeks before our interview. He also enjoys running, hiking and camping, and collecting items off of E-Bay. Jordan proudly states that both his wife and both of his parents work in health care. His wife is a social worker, his mother is a RN in the critical care unit of the same hospital where he is employed and his father is an engineer at the hospital as well.

Jordan’s previous job experiences have been customer service related. He was a bellman at a local hotel, a security guard at his college and worked at a concession stand at a local baseball field. All of these experiences enabled him to “obtain people skills” which inform his ability to relate to his patients. Jordan believes that his past jobs and the experience that he has gained from them all inform his experientially based definition of intuition. Jordan states that he is Protestant and feels that nursing is a vocation in which he perceives himself to be “an extension of God’s hands.” He also feels that his spirituality informs his use of intuition in nursing and perhaps gives him a sense of confidence upon which he bases his actions.

Kaitlyn

Kaitlyn is a 27-year-old single, white woman who completed her bachelor’s degree in nursing eleven and a half months ago. Prior to this degree she had completed an associate degree and worked as a licensed physical therapy assistant. She decided to get
her bachelors degree in nursing because she states that this is “something she always knew she would do someday” and it was a stepping stone to getting her master’s degree in nursing. She is presently taking her first class towards this degree. Kaitlyn feels that “she was meant to be a nurse.”

Kaitlyn is presently working in a coronary intensive care unit full time on evening shift. Although Kaitlyn’s orientation to the intensive care unit is over she states she continues to ask many questions. She feels fortunate in working with such a wonderful group of nurses with whom she feels comfortable enough to ask questions and test her intuitive hunches. Kaitlyn’s prior work experiences have been as an emergency medical technician, a patient care technician and a technician in a medical laboratory. She feels she draws on these prior job experiences to inform her intuition as a registered nurse. Kaitlyn also feels that intuition is enhanced by her spirituality and her practice of yoga, which she feels helps to clear her mind.

Kaitlyn has three sisters, two older and one younger than herself. She usually talks to her one sister three or four times a day and her mother usually once a day. Kaitlyn’s parents have been divorced for 20 years. She was very close to her grandparents who she feels “were her mentors and have impacted her life in a positive way.” They are both deceased now but she spoke of them very fondly and lovingly. Kaitlyn proudly admits that she is the only one out of her family to go to college. She enjoys playing the piano and has done so since she was 8 years old. She also enjoys exercising, hiking, crafts, decorating, shopping and spending time with her nieces and nephews. She talked especially fondly of her 6-year-old nephew.
Kaitlyn states her boyfriend is supportive but can’t “really deal with the nursing thing” so she relies on her girlfriends for support and reassurance in this area. She states she “does not have a lot of friends but has some friends that she can count on.” Kaitlyn believes that being intuitive is “about being open minded to others, to ones surroundings and to one’s experiences.”

Karen

Karen is 25 year-old female who was very friendly and willing to help with this study. She thoughtfully considered each of her replies to the questions that I asked. Karen is the oldest of three girls. Karen states that she has a great relationship with her parents and finds them to be very supportive. Karen’s mother does respite care and also volunteers for Hospice. Karen feels as though she gets a lot of support from her family as well as from her friends.

Karen has been married for four years and is very grateful for her husbands support and patience during nursing school. Presently, they enjoy doing things together such as fixing up their home, hiking and spending time together. Karen also enjoys reading, yoga, crafts (scrapbooking, crochet, sewing, papermaking, etc.), gardening and playing with her pets. Yoga, she feels, helps her to center herself and listen to her inner voice. She states that in the near future she and her husband are going to try to start a family, which she is very much looking forward to.

Karen describes herself as a “quiet and easily intimidated person” yet “very caring, giving, and spiritual” who is active in her Evangelical Free Church. Karen shared that “often times people go to her and her husband for advice or help.” She wasn’t quite
sure why this is the case, but she and her husband have been told that they have a way of asking the right questions, getting involved in just the right way, and are able to “read what it is that people might need even before they might realize what it is themselves.”

Karen has been working at a women and babies hospital for nine months, a position that she really enjoys. Her previous job experience, working with teenagers as a youth minister, has “really enhanced her intuitive ability.” In this role, she would often have to read their body language or look at their facial expressions to identify exactly what it was that the teenagers were trying to communicate; often times they would not tell you the entire story until they began to trust you.” Karen sees this same pattern occurring in relationships with her patients.

Kylee

Kylee is a 24-year-old female who recently married her high school sweetheart. Kylee is presently working in the Emergency Department (ER) of a large city hospital in the northeastern part of the United States. She has been practicing nursing for six months full time. Kylee was working the 3 p.m. to 3 a.m. shift but recently switched to the 7 p.m. to 7 a.m. shift so she could spend more time with her husband.

Kylee is very close to her mother and father. She proudly shared that she is very much daddy’s little girl. She has one older brother. Both her brother and her father work for the police force. Her mother has been a stay-at-home mom and has an in home day care. Kylee feels that her parents are two of the most intuitive people she knows and recalls that they always seems to be right without having any rational basis as to why.
Kylee enjoys shopping, baking, traveling, going to the movies and spending time with her husband and family.

Kylee has a seizure disorder, which has presented her with special challenges during her nursing education as she would occasionally have seizures during class or clinical. On the other hand, Kylee believes that having a seizure disorder enhances her nursing practice because it helps her to empathetically relate to patients who have similar conditions. During nursing school Kylee had a great group of friends who supported each other and helped Kylee get any information she missed due to her seizure disorder. Kylee states she could not have made it through nursing school without their help, encouragement and support. Likewise Kylee feels that she works with a great group of nurses who understand her seizure condition and are always willing to help out and take over her patient load in the ED if they need to.

Lily

Lily is a 23-year-old white female who originally was in a master’s level program for physical therapy at a large university two hours away from home. Lily found this to be too far away from her family and realized that going away from home to college was not a good choice for her. She stayed at that university for two years with the help and encouragement of her family but began to realize she was getting more and more lonely and felt that this was not helping her learning or her mental health. Lily states she had to “center herself to figure out what it was that she needed to do at this point to keep herself safe.” Consequently, she moved back home and decided to commute to a local college.
Lily continued college because she “loves learning and loves education,” and admitted that nursing was not something she thought about or even really wanted to do. She further notes that she had no idea what nurses even did. Once Lily did choose nursing she initially “hated it and it wasn’t until later in her clinical that she realized it is really cool.” Not only did she think it was cool but she also felt as though she wasn’t getting enough practical, hands on experience. Consequently, she signed up for an emergency medical technician (EMT) class. Presently Lily is working full time in an Emergency department (ED) of a large city hospital and also volunteers as an emergency medical technician (EMT) on her days off. She is very happy with her decision to study nursing and enjoys the EMT work as it provides her with a different prehospital focus of emergency care. Not only does Lily feel that the EMT work was a valuable experience but an added bonus, is that this is where she met her fiancé whom she plans to marry within the next year.

Lily describes herself as shy and states she was shy all her life. Even in elementary school, the teachers would comment on her shyness and report to her mother that she wasn’t interested in learning. Lily feels that she was very interested in learning and her shyness enhanced her learning. This shyness now enhances her intuitiveness because “although she wouldn’t say much she was in tune to everything that was going on around her.” She also recalled that during her educational process, including nursing school, she was very anxious and nervous and remembers that it was difficult to learn because of feeling so nervous. She hopes, some day, to enjoy learning. Lily also states that, when dealing with a lot of change and newness, she continues to feel anxious and nervous.
Lily enjoys exercising and doing aerobics at a local gym. Her parents met in college and she reports they are still “happily married.” Her mother went to school for respiratory therapy but has been a stay at home mom. Lily’s father works for a local telephone company. Lily has one older brother who was recently married.

Lily has been working full-time for 9 months in the ER and works the 11 a.m. to 11 p.m. shift. She admits she is fascinated watching various nurses use different approaches to get at the same goal. She feels that she learns a lot from her experienced colleagues. Lily tries to keep an open-minded attitude towards patient care and likes to incorporate different approaches into her practice. Lily further recognizes that there are many different ways and many different perspectives to look at a patient care situation or events that occur in the world.

**Linda**

Linda met with me in the hospital where she is employed after one of her shifts. Even though it was the end of her day she did not appear to be tired and was very willing to sit and talk with me about her feelings regarding intuition and the meaning it has for her in her life and in her practice. Linda has been employed for two months in the Intensive Care Unit of a large inner city hospital. She is currently in orientation and is presently working under the guidance of a preceptor.

Linda is a 27-year-old Caucasian female who recently has become engaged. Her family is very supportive and consists of her father who is a welder, an older brother who works in construction, and her mother who has been a nurse’s aid for 25 years. Prior to becoming a nurse, Linda was a surgical assistant in a dental office for many years. Linda
felt that she wanted a college education and therefore chose to go to nursing school. During our interview Linda talked about the importance of her education and how she was the only one in her family to earn a college degree, which means a lot to her.

Linda feels that her intuitiveness comes from her work as a nurse’s aid and her experience as a nurse extern during her college education. She also attributes some of it to hearing her mother’s nursing stories over the years. Additionally, working in the dentist office afforded her some exposure to the medical field. Linda states she looks forward to obtaining more experience as she feels that experience is “the fuel for her intuition.”

Linda enjoys weight training and spending time with her nieces and nephews. She feels that being around small children also increases her intuitiveness. When she is with her nieces and nephews she feels that she has to “listen to their cries and determine if it is a hunger cry, a pain cry, or an ‘I’m wet’ cry.” She laughed as she explained a recent babysitting experience when she had to intuitively listen to her cry to determine what it was that her niece wanted. She also stated that when you are around individuals who can not speak you have to pay close attention to their nonverbal cues. She recalled her volunteering experience at a nursing home and told me about a patient biting her because the patient was frustrated that he could not express his thoughts.

Olivia

Olivia is a 24-year-old white female who has been married for 10 months to a man in the military. In the near future they will be re-stationed to a military base in Texas. Although she is not happy about the relocation she is grateful he is not being sent
to Iraq or Afghanistan. Olivia is working full time, day shift, on a woman’s surgical floor. Olivia states she has always been interested in women’s health issues. In nursing school she completed an honors graduation project by investigating meningitis in female college students. Recently Olivia started an online master’s degree program to become a family nurse practitioner.

   Olivia has one older sister who is a stay at home mother of three young boys. Olivia describes herself as being “very structured and organized whereas her sister is very artistic.” Olivia enjoys scrapbooking although she states it takes her a long time to do because of being structured; she also enjoys playing soccer and exercising. Her parents live in Germany where her father is an electrical engineer. Her mother has a master’s degree in special education.

   Olivia feels that “anytime in life that you do real well, such as scoring a soccer goal, getting an award for reading the most books or scoring highly on an exam, that experience boosts your self confidence, your self efficacy and makes you believe in yourself. This in turn enhances your willingness to listen to yourself, your intuition and act on your intuitions.”

Tina

   Tina is a 27–year-old married white woman who agreed to meet me at my home. She brought her eight-year-old daughter along to play with my boys. Tina is presently employed as a nurse on a cardiac telemetry floor where she has worked for 6 months on night shift from 11 p. m. to 7 a.m. She describes her job as being challenging because of the type of patients and the care they require. She also admitted that it is challenging
because she is trying to get adjusted to the night shift schedule of sleeping when everyone else is awake. Her daughter is in third grade so night shift is the optimal shift for her so she can see her daughter and her husband in the evening. In addition, Tina “enjoys night shift because it allows her more quality time with her patients with less of the interruptions that occur on day shift.”

Tina very much enjoys nursing. She likes meeting new people and feels very supported by her colleagues. One complaint that she verbalized about her new role as a registered nurse is the amount of paperwork. She would like to decrease some of that so she can focus on the reasons that she went into nursing: “patient care, not paper shuffling.”

At the time of our interview Tina appeared very happy, often laughing. She shared that she enjoys home decorating, shopping, sewing (she was presently working on curtains for her daughters bedroom), and going to garage sales so she “can create things out of others discarded materials.” Tina also likes to read but admits to reading a lot less now that she is a nurse.

Tina has had several previous jobs which she feels helps her be more “in tune intuitively.” She was a family services counselor, a nanny for a family with young children and a coordinator for various group homes. One of the group homes was a home for run away girls and the other was a group home for mentally retarded men and women. Tina describes the job at the group home working with the mentally retarded as being the one that helped her to “hone in on peoples ability to communicate nonverbally.” She stated initially, “she found the job to be very frustrating because she could not communicate with the individuals, but after several weeks of getting to know them she
was able to pick up on their body language and facial cues and consequently was able to communicate with them even better than with individuals with verbal speaking abilities.”

Tina has 3 brothers, two who are older and one who is younger. She explained that growing up with three brothers was not always easy and she had to use her intuition very often to get away from them or to know when they were going to start picking on her. All of her brothers are currently working in human services. She describes her family as being “very spiritual.” Tina’s family believes that “what you know or feel in your soul, is more important than what you know as a result of science.” Tina’s parents were missionaries in Brazil for six years when Tina was a teenager. She described this experience as one that has “enhanced her intuitive ability because it has helped to relate to another culture as well as to relate to others on a different level as she could not speak Portuguese.”

Tonya

Tonya is the only novice nurse in this group of participants who was working in a volunteer capacity as a registered nurse. When Tonya started college at a Catholic University, she knew she wanted to do a year of peace and justice work after graduation and chose to do so at birthing center in a Midwest southern state. Tonya both works and lives at the center where she predominantly cares for transient, Hispanic, migrant workers. The type of services provided at this center is primarily maternal and childcare, labor and delivery care as well as postpartum care. In addition Tonya states a large part of her role, as a RN is to carry out teaching which encompasses prenatal care, childbirth
education, newborn care and birth control techniques. Tonya states it is not unusual for her to put in over 60 hours a week fulfilling her volunteer role.

This interview took place over the phone. Tonya’s warm personality, sincerity and genuine commitment to the work she is doing was clearly detectable in her voice. This experience according to Tonya is affording her the opportunity to gain valuable experience that she hopes to use in the future when obtaining her master’s degree and becoming a midwife.

Tonya is a 23-year-old, single, white, female who is the youngest of three. Tonya states that her parents are still married after 35 years and are “madly in love.” Tonya enjoys doing yoga, running, kayaking, mountain biking and just staying active. However, at this point in her career, with working more than 60 hours a week, she admits she doesn’t have much time for these activities. Instead, she admits, she drinks coffee and reads good books. Tonya is also getting married very soon and has been busy planning her wedding.

Out of the 16 participants in this study, Tonya scored the highest on the Miller Intuitiveness Instrument, with a score of 232. She attributes her intuitiveness to her ability to take in the whole picture and listen holistically to her patients. She also attributes her intuitiveness to her mother, “who has been a nurse for 36 years and has evidenced her use of intuition with everything from parenting to nursing to getting her car fixed.” Tonya feels that intuition is a personality trait that she inherited from her mother. Tonya states her mother, “has very much honored and modeled her intuitive feelings to her without even realizing she was doing it.” Tonya believes other experiences also attributed to her increased self-perception of intuitiveness. These experiences include
working as a nurse’s aid and as a nurse extern during her nursing education. The last experience that Tonya feels is significant is being raised Catholic and attending a Catholic university. Tonya believes nursing is a vocation and consequently nursing intuitiveness is very much based on your spirituality and is a gift from God.

Summary

In summary, this chapter introduced the participants to the reader. Sharing stories regarding significant life experiences, in their own words, provides the context within which the novice nurses define and give meaning to intuition. For the reader it lays the foundation for the interpretation of the research findings. These findings will be discussed in the following chapter.
CHAPTER 5

PRESENTATION OF RESEARCH RESULTS

The purpose of this research was to discover the meaning of intuition to novice registered nurses while they were in their first year of practicing as a professional nurse. These novice registered nurses have a high self-perception of intuitiveness as identified by the Miller intuitiveness Instrument. Secondly, the study sought to gain insight as to how intuition informs the novice registered nurses’ decision making in their practice. This chapter introduces the themes and patterns that emerged from the interviews and are the result of a constant comparative analysis of participant’s narratives. The themes will be presented and supported by direct verbatim quotes. It is only through the process of hearing the participants’ voices that the reader is able to gain insight into how intuition has informed the beginning practice of these professional novice registered nurses.

The findings of this study are organized into four major sections: 1) Contextualizing and Defining Intuition, 2) Accessing Intuition, 3) Outcomes of Intuition in Practice, and 4) The Culture of Nursing Education and the Nursing Profession. The following data display on the next page summarizes the main findings of the study.

Contextualizing and Defining Intuition

This section describes how the novice registered nurse goes about contextualizing and defining intuition and will begin by evidencing how intuitive mentors from life or practice informed the novice nurses meaning of intuition. Secondly, this section discusses the multidimensions of intuition as “gut feeling” informed for many of the participants by
DATA DISPLAY

I. Contextualizing and Defining Intuition

A. The Important Role of Intuitive Mentors
B. Intuition as a “gut feeling” and Pinpointing its Sources
   1. Spirituality as a source
   2. Personality
   3. Rooted in Personal Life Experiences
   4. Rooted in Personal Job Experiences

II. Accessing Intuition

A. Developing self trust
B. Trusting patients and professionals
C. Repositioning Oneself in Time and Space to Connect with Patients
   1. Observing
   2. Listening
   3. Touching
D. Patient Variables that Affect Intuitiveness

III. Outcomes of Intuition in Practice

A. Guiding patient decision making ~ More than just the obvious
B. Holistic patient care (Body, Mind and Spirit)
C. Navigating Among the Professional Relationships
   1. Dealing with power relations among medical and nursing professionals
   2. Getting a multidisciplinary team involved
D. Creatively Dealing with Limited Resources

IV. The Culture of Nursing Education and the Nursing Profession

A. The Continuing Reification of the Medical Model
B. Getting Mixed Messages
C. Dealing with and Unlearning Fear Associated with Nonrational Ways of Knowing
D. Finding a Balance among Intuition, Science and Other Ways of Knowing
   1. Wanting and Appreciating Stories
   2. Slowly changing the profession
their spirituality or inner wisdom, for others by their personality, while for others it is rooted in their previous life and job experiences.

*The Important Role of Intuitive Mentors*

All of the participants were able to recognize without any hesitation a person who has influenced their self-perception of intuitiveness. For many it was a parent or a spouse; for others it was a significant other, professional preceptor or mentor whom they identified once they began their nursing career. Irregardless of who was identified these individuals all enjoyed sharing their stories about intuition in nursing or about the role of intuition in their life.

Whomever this intuitive mentor was identified to be, the participants’ stories evidenced how many of these mentors exhibited the same qualities. They were able to “read people,” they could “zero in on situations which allowed them to act quickly,” and they were able to “take in the whole situation at once.” For many novice registered nurses their intuitive mentor was their mother, close family member such as an aunt, or significant other. For example, Tina describes her husband as having the ability to intuitively know how to zero in on things and credits him for being her intuitive mentor. Tina states:

My husband has taught me how to see the big picture. He works as a therapist and frequently shares stories about how, instead of focusing in on the immediate problem, he can see all around it. For example, when someone is having a behavioral issue, he usually can zero in and recognize that this is a behavior problem, but the core of it is anxiety. Instead of focusing on the outward behavior, he intuition zeros in on why the person is anxious.
Jordan, Kylee, and Tonya all identified their mothers as their intuitive mentors.

Tonya describes her mother, a registered nurse with 36 years of experience:

My mother always, always, I mean always uses intuition in all aspects of her life, from parenting to nursing to getting her car fixed. She uses intuition in all aspects of her life, but particularly in her nursing. She was an ER nurse for years and years. She would always talk about that feeling you get and you should trust that feeling especially as a nurse when you are not sure about what to do. She said it would happen all the time with her. She would have a client come in and they were not giving her a full story or there was something shady and she could have passed it off, it would have been acceptable if she did pass it off but something made her probe more. She always explained it like her red flags went up. Growing up with my mother, honestly she was likely the queen of intuition!

Tonya felt that her mother very much honored her intuition and consequently Tonya learned by example without her mother even purposefully teaching it. Tonya states:

We learned it, both my sister and I, in everything, I mean, it was just something we learned. My mother could know that something was wrong and not know what it was and then confront us and I would be like, oh man, how did you know. She would say I just have a good feeling, I know what is going on. To give you an example, the day my first patient died in nursing school. She told me I was thinking of you all day and I didn’t have a good feeling. So she called me while I was in clinical, which she NEVER did and said are you okay, I am just worried about you. I just have a really bad feeling. I couldn’t talk then so I called her back
and said actually, when you called, my patient had just died and I was very upset and she just knew! She is often like that. So that was definitely a huge influence in me being intuitive.

Ethan believes his mother, who is a nurse, is his intuitive mentor. Ethan describes how his mother shared many of her nursing stories with him:

She always seemed to know. She could put her thumb on what was going on. If she couldn’t put her thumb on it somehow she knew something was going on. She just always seemed to know. When I was growing up my mother would share her nursing stories from her day at work with us. One day when I was 16 she took me into work with her. I had no idea that there were even men in nursing until that day. I was visually picturing the nurse to be the image I saw on the television. You know the white uniform, the pillbox hat, the mean lady with the needle, making you do stuff you didn’t want to do. This experience not only had something to do with me going into nursing but it informs my practice today because I learned so much from my mother, about how to listen to that inner voice.

Diane mentioned that she had three aunts who were nurses in a variety of hospital specialties. Diane not only credits them for influencing her decision to go into nursing but she feels that hearing their stories when she was young has influenced her ability to think holistically and intuitively. Diane states her aunts were very intuitive and were able to see the big picture. She recalls:

They have seen a lot of stuff, and have very much background they share with me. They have each been working in nursing for more than 20 years. They have
very fined tuned assessment skills in lots of areas including psychiatric nursing, and medical surgical nursing. They know how to intuitively act when there is not much quantitative evidence to pick up on. They shared a lot of this feeling based stuff with me. They told me about this instinct, thing where, you just know when a patient is in danger, you just know if someone is going to code, and sometimes you just have to base your nursing interventions on just the atmosphere, the feeling that you get from some of these patients.

Other participants such as Karen, Tina, Linda, Allison, Kaitlyn, and Emma identified their intuitive mentors to be their hospital nursing preceptors or another nurse on the floor who was a resource for them as a new nurse. For these participants their mentors had years of experience ranging from five to thirty years. These participants were also the ones who defined intuition as being based on experience. For example, Karen said it this way:

One of the girls that has done most of my precepting, I would describe as very intuitive. She seems to know what to do and is often two steps ahead of me. She can look at the whole situation and just know where to go from there. She does a great job at reading people and knowing what their needs are. Sometimes before they even ask. I think a lot of what makes her intuitive is she cares about people and is interested in their needs. I think that contributes to her intuitiveness.

When I asked Karen to clarify “read people,” Karen replied:

She is able to anticipate their needs either because of their expressions or their body language and is able to interpret the entire situation. Whether it be with the patient or family members, she intercepts with what is needed in that situation.
Tina also credits her coworker as being her intuitive mentor. Tina describes:

I work with a nurse who has practiced for 20 years and is very skilled in nursing. She has even gone on to get her Master’s of Divinity. She has a lot of education and experience interacting with people. As a new nurse, I sometimes tend to overreact to situations because I feel that people are really, really sick. But she can look through the situation and say, ‘this is just a middle of the night crisis, if we wait a little while this will all work out.’ She is almost always right! It is so nice to work with her.

When I asked Tina why she felt that she is intuitive, she responded:

Well, I can ask her to help me assess a patient and she will always, gladly come in and it seems that with just a few of the right questions, she gets down the heart of the matter very, very easily and is able to zero in on key assessment areas to rule things out quickly and usually can help make the patient more comfortable and are walking out of the room in no time. She is a lot more definitive.

Linda describes one of her preceptors who have been there for 23 years as being her intuitive mentor. Linda stated her mentor:

Has the confidence to act on her intuitiveness. Her experience is a huge part of her confidence in knowing that it is okay to recognize those feelings that something is wrong here or something is good, but mainly in this field that something is wrong. She shares her thoughts with me and I learn from her.

Allison described a “senior nurse” as her intuitive mentor. She states:

This nurse has been practicing for 10 – 15 years and is really into teaching.
She can perceive problems before they are actually problems and get the doctors
to do something about it before it gets worse.

Kaitlyn stated her intuitive mentor has worked in the coronary care unit for
twenty years. Kaitlyn states she “just knows things” . . . “she looks at the whole picture
and she models these assessment skills to me.” Emma’s intuitive mentor is one of her
coworkers. Emma describes her as….

Having five years of experience and she very much takes the bull by the horns
even when there isn’t factual data, if she feels a certain patient should not be on
our floor, she will contact the supervisor and say this patient should not be on our
floor and provide rationale as to why but other times she doesn’t even have
rationale, it is just a feeling that she has. We talk about these feelings and I learn
what she is thinking underneath it all.

The descriptions from these novice registered nurses clearly validate how intuitive
mentors have had an impact on the development of intuition in these novice registered
nurses practice. Every participant, with the exception of Adam, who recognized the
importance of getting his own experiences, voiced the significant impact that these
intuitive mentors have had in their life and practice.

*Intuition as a “Gut Feeling” and Pinpointing its Sources*

The definitions shared by these novice registered nurses regarding their meaning
of intuition was rooted in a multidimensional view of intuition as “gut feeling.” As noted
in the table summarizing participant’s definitions on the next page, most of the
participants actually used this term “gut feeling,” both in what they said or in describing
the metaphors or symbols they shared to represent intuition. Furthermore, this “gut feeling” originated from different sources – either from spirituality or inner wisdom, personality traits with which one is born, life experiences, and / or previous health care related experiences. Eight of the participant’s felt their definitions of intuition were informed from several sources not just one source.

**Spirituality as a Source.** Seven of the participants attributed this “gut feeling” partially to God, or to a larger sense of spirituality, though it was only, Karen, who suggested intuition to be solely from God. Karen states:

Intuition is a God given ability that I do not have on my own. It is a gut feeling that I get about something. I am not sure why, I just know I have to follow through in a certain way . . .. Intuition is a God-given ability that not everyone has, God has enabled me with it.

Several of the participants discussed intuition in relationship to spirituality in connection with other factors. Tonya, for example, reveals that nursing for her is a vocation. She feels that:

Being a nurse, it is very much where I am meant to be. This is where my skills and my weaknesses come together to make a great service to someone else. I think in doing that and having that foundation of spirituality, I am on top of that. I honor that in my life. I take time for that and center myself so that I can be fully present with another person.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Personal Definition and Source of Intuition</th>
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<tbody>
<tr>
<td>1. Adam</td>
<td>Holistic way of seeing that is not learned. It affords the nurse the ability to take in the entire patient scenario very quickly. &lt;br&gt; <strong>Source:</strong> Personality trait and based on the past experience.</td>
</tr>
<tr>
<td>2. Allison</td>
<td>A gut feeling or a voice in your head that makes you feel uncomfortable about something. &lt;br&gt; <strong>Source:</strong> Learning and doing (experience)</td>
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<tr>
<td>3. Austin</td>
<td>“The ability to have the underlying knowledge of a disorder/disease process and then apply that knowledge into nursing practice without hesitation in an effort to predict what is going to happen.” It is a “gut feeling, that something is just not right.” &lt;br&gt; <strong>Source:</strong> Knowledge</td>
</tr>
<tr>
<td>4. Diane</td>
<td>“A nonverbal feeling where you just know something… You are acting on faith based knowledge. Intuition is deeper than instincts… you just know something is going to go in a certain direction either good or bad.” &lt;br&gt; <strong>Source:</strong> Faith or God and Past Experiences.</td>
</tr>
<tr>
<td>5. Emma</td>
<td>“A way of seeing a problem before it actually occurs, a gut feeling, an instinct that allows the nurse to act quicker than someone who does not use intuition.” “knowing inside of myself what is right and what is wrong…having a feeling, like a good feeling or a bad feeling about what’s happening and what you’re supposed to do in that situation.” &lt;br&gt; <strong>Source:</strong> Inner self</td>
</tr>
<tr>
<td>6. Ethan</td>
<td>“A gut feeling that makes you stop and really take notice to what is going on and take everything in, in the patient’s room.” &lt;br&gt; <strong>Source:</strong> Experience and Spirituality</td>
</tr>
<tr>
<td>7. Helen</td>
<td>“A feeling, a gut instinct, that you get about a situation, a person, or an event that something is going to happen.” Everyone has intuition to a certain degree. Intuition is informed by past life and cultural experiences. &lt;br&gt; <strong>Source:</strong> Personality trait and past experiences</td>
</tr>
<tr>
<td>8. Jordan</td>
<td>A gut feeling, a nagging that won’t leave you alone. Based on subtle cues from the patient that informs you as to what to do. &lt;br&gt; <strong>Source:</strong> Experience</td>
</tr>
<tr>
<td>9. Kaitlyn</td>
<td>“Is the ability to subconsciously know something.” “It is that gut feeling that you get from reading people and observing or analyzing their unspoken body language and facial expressions as well as the tone of their voice…it is an inner sense which allows one to look at the patient holistically.” &lt;br&gt; <strong>Source:</strong> Experience ~ not only her own, but other nurses experience as well.</td>
</tr>
<tr>
<td>Participant (cont.)</td>
<td>Definition and Source of Intuition (cont.)</td>
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| 10. Karen           | “A God given ability that I do not have own my own. It is a gut feeling that I get about something and I am not sure why but you just have to follow through in a certain way.”  
**Source:** God given gift. |
| 11. Kylee           | “It is a gut feeling or a feeling that weighs on the back of your mind and it won’t go away so you know you have to do something about it….it is like a nagging worry”  
**Source:** Inner knowing combined with sound knowledge base; Spirituality; Everyone has intuition but not everyone uses it. |
| 12. Lily            | “A feeling or thought that you get, telling you that something is not right. Intuition allows me to see ahead and guides my nursing actions.”  
**Source:** Personality Trait; Cues from the patient and the environment, past life and practice experience |
| 13. Linda           | “A gut feeling that you get when there are no other reasonable signs such as hemodynamics to point you in the right direction. …Experience, both in nursing and with people, is a huge part of in and along with that is the confidence in yourself to be able to express your intuitions.”  
**Source:** Experience |
| 14. Olivia          | “A way of knowing that everyone has, in a way being psychic, just having a feeling a gut feeling, that something is going on, not necessarily negative; it could be positive too.”  
**Source:** “True inner knowledge that everyone is born with and is enhanced by positive and negative life experiences.” |
| 15. Tina            | “A skill that is learned yet is also part of your personality, some people are born with it and others have to work harder to develop it.”  
“Intuition is informed by my ability to connect with another human being at a human being to human being level.”  
**Source:** Personality trait |
| 16. Tonya           | “Intuition is a feeling that nags at you., a red flag that drives you when all the objective data points in another direction.” “Your vibes go out and consequently you pursue and assess the patient a little more.”  
**Source:** Spiritual gift and Personality Trait |

Diane explained that she grew up in a religious family where faith in God was very much encouraged and honored. Diane stated that she oftentimes spends time in prayer prior to working her shifts just to ask God to guide her and help her with her job. Diane clarified it this way:
Intuition for me is a nonverbal feeling where you just know something… You are acting on Faith based knowledge as well as from previous experiences. Intuition is deeper than instincts where you just know something is going to go in certain direction either good or bad. With the religious stuff, I mean faith and intuition, you have to have faith in order to act on your intuitive hunches. You have to have faith in order to know that it is right. So, I think it makes sense to me that people who spend more time working on a relationship with God, would be more intuitive because they are better able to connect with other people also.

Similarly, Olivia shared that:

Spirituality gives you a belief system, it gives you something to hold onto. It provides energy. It gives you something to believe in and follow-up with and it is the same kind of thing as intuition. Intuition is a belief, it is a feeling, and I think they go hand in hand together although I am not exactly sure how.

Seven of the participants used visual metaphors or symbols that also spoke of this connection of intuition to spirituality or inner wisdom. Kaitlyn shared a picture of summer flowers and talked about the inner beauty of knowing and discussed the nature of flowers blooming from the inside out. Karen talked about her picture of a brook running between several trees and the quietness and the fact that she connects with nature, which she feels, brings out her intuitiveness. She also talked about how “intuition runs through your body similar to the brook, to get to the feeling level, where you know you must act on it.”
Emma talked about a flame of a candle as being the Inner Light or inner wisdom, that when lit, gives off light and heat to those who are willing to take it in. She related the flame to intuitive vibes patients give off for their nurses to pick up on.

Several other participants brought Bible verses, sayings, prayers, or songs to enhance and further clarify what informs their meaning of intuition, which speak of its connection to spirituality for them. Tonya shared the following Bible verse… *I can do all things through Christ who strengthens me. Philippians 4:13.* She talked about strength from this verse as a way to not only inform her intuitiveness but also to give her confidence to act on it.

Helen expressed that, on the way in to work, she plays the same song to give her confidence to act on her intuition. This song talks about “do not duck and run, because that is not the person that I am.” Helen does not want to duck and run, rather she strives to listen to her intuition and act as a patient advocate. Helen states she finds herself listening to this song less now than she did in the beginning of her practice because she has more self confidence now. In addition, Helen shared the following quote from Maya Angelou “You do what you know, and when you know better, you do better.” This saying has significance for Helen because she tries to do what she knows to do for her patients and listen to that inner voice to always act on the patient’s behalf.

Several of the participants, when defining intuition as connected to their spirituality or inner wisdom related it specifically to their nursing practice. Tonya believes that intuition does not have anything to do with experience and shared the following example from her practice where she did not have any kind of previous experience that would help her deal with this situation, yet she knew exactly what to do
and was able to act very quickly without having the time to think about how to save this patient and her baby.

Today, we had abruption with fetal distress and that hardly ever happens and I have never had it happen before and it was one of those emergent situations where you need to know what to do very quickly there is no time to think! I was working this patient up and thinking to myself something is not right here, I don’t quite know what it is, but something isn’t right. I was beginning to feel very uncertain and then something just came over me and I felt very sure of myself. I started acting and intervening and then went to tell the midwife to get in here right away and things began to fall in place.

Tonya recalls that it wasn’t until after the situation was over and she knew the patient and the baby were doing fine that she reflected back on the situation and wondered what caused her to act the way that she did on behalf of her patient and her baby. She felt that because she had no experience with this before, that it had to be inner wisdom.

Tina voiced how she spends time praying before and during her shifts to ask God for guidance. Tina shared that she grew up in a spiritual family where “knowledge from the soul was valued more than scientific knowledge.” She believes this perspective has improved her ability to be intuitive and states, in her practice as a new nurse, that she gets divine help:

When I am with my patients I absolutely feel that I wouldn’t be able to do as well without God helping me. I often pray to God to help me make the right decisions and the right connections, so I can help my patients to the best of my ability. I feel
that I have had many more good experiences than bad experiences with my patients, so, I know that prayer works.

A good summary to defining intuition as “gut feeling” in relation to inner wisdom and nursing practice is Ethan’s definition of intuition. He believes intuition is “A gut feeling derived from experience and spirituality that makes you stop and really take notice to what is going on and take in everything in the patients room.”

*Personality as a Source.* While some participants felt that intuition as “gut feeling” was dependent upon spirituality and / or experience, others, such as Tina, Emma, Helen and Lily, believe that a person’s intuitiveness stems from inherent personality traits and has very little to do with spirituality or experiences. Some of the personality traits as identified by these participants that may increase one’s intuitiveness are being open minded, curious, in tune with one’s own body, creative, and empathetic. Tina describes intuition as:

A part of your personality that some people are born with while others have to work harder to develop it. It is informed by my ability to connect with another human on a human being to human being level.

Emma believes that intuition allows her to see the problem before it actually occurs, a “gut feeling,” an instinct that allows her to act quicker than someone who does not use intuition. She describes it as:

Knowing inside of myself, as a result of my personality, what is right and what is wrong . . . having a feeling, like a good feeling or a bad feeling about what’s happening and what you’re supposed to do in that situation. I feel I was born with it.
Diane describes self-awareness as a trait that enhances her intuitiveness. She states she tries to be very self-aware. She revealed:

I did take a yoga class once, but I haven’t had a chance to lately. But I try to dig deeper into myself, deeper into who I am as a person. I think being self-aware plays a big part of my intuitiveness.

Helen feels that being “open-minded, creative and curious about patient situations and life in general enhances her intuitiveness.” Helen disclosed that:

Probably everybody has a degree of intuitiveness. But whether they actually, listen to their intuition, I think other factors play a part in that and kinda of override that. I think that the more people are open-minded and curious the more they will listen to their intuition. I feel that I tend to be open minded, curious and creative and that is most likely why I listen to my inner voice.

Lily states that creativity enhances her intuitiveness, but she feels a big part of that is open-mindedness and being perceptive. Lily states:

I think it is fascinating, the different approaches to nursing practice that I have seen experienced nurses take to get to the same goal or the same end result. I think that people who don’t look at someone else doing something a little bit differently than the way they would do it, and say, ‘I never even thought of that, that really works well, I am gonna incorporate that into my practice are missing something very important. There are tons of nurses and I feel I could pick something up from probably every one of them. I took a philosophy of ethics class and I learned that the way you look at a situation is very important. For example, the World Trade Center, we Americans think of that as a tragedy, you
know, there is no question about it but, the people who were flying those planes, to them, it wasn’t necessarily a malicious act; it was an act of heroism and they feel they will be rewarded because of this act of courage. The importance of this to my nursing and my increased intuitiveness is you have to step back from a situation and say, wait a minute, what were they thinking? What is my gut telling me about this? Why did they do this? When I challenge myself to think outside of our cultural box or whatever box I am in at the time, I de-stress myself. I think, you have to be open to different ways of doing things and different ways of knowing things including intuition if it is going to benefit someone. I think this perspective makes my life more meaningful when I challenge myself to do be perceptive and open-minded.

The majority of the participants believed their intuition to be multidimensional, derived from combinations of the above sources. For example, Tonya and Kylee felt that their intuition came from God as well as their personality. Olivia, Lily, Helen, and Adam felt that their intuitiveness was from their personality as well as past experiences. Diane and Ethan felt their intuition was a combination of a God given gift and life experience.

Tonya believes intuition:

Is a feeling that nags at you, a red flag, that drives you when all the objective data points in another direction. Your vibes go out, and consequently you pursue and assess the patient a little more holistically. This comes from your personality as well as from God who allows you to be curious about something that doesn’t feel right.
Helen adds that intuition:

Is a gut instinct that you get about a situation, a person, or an event that something is going to happen. Everyone has intuition to a certain degree because it is a personality trait that is shaped by past experiences in your life.

Austin shared a quote from a book that he was reading entitled the Gift of Fear by Gavin DeBecker (1994). The quote is “Technology is not going to save us. Our computers, our tools, our machines are not enough. We have to rely on our intuition, our true being” (p. 24). Austin was informed of this quote while taking an intensive care course that his hospital was offering. For him, it serves as a reminder of the importance and significance of intuition.

Rooted in Previous Life Experiences. Nine of the participants stated that previous experiences informed their meaning of intuition. For some it was life experiences, for others it was previous job experiences and for other participants it was a critical incident that happened while they were working as a registered nurse. These life experiences ranged from having a seizure disorder as noted by Kylee, to experiencing a death in the family as noted by Helen.

As described by Helen, the death of her father five days before her 17th birthday shaped her definition of intuition. Helen talked about when she was growing up she did not have a “normal childhood.” She shared very openly that her father was an alcoholic and that she lived in a household where domestic and sexual abuse occurred frequently. Additionally, Helen disclosed that she was sexually abused at a very young age and there were “lots of drugs and everything else in her house.” Helen clearly believes these experiences have not only informed her definition of intuition but in addition has
informed her career choice, and how she raises her own daughter. Helen defines intuition as:

A feeling, a gut instinct, that you get about a situation, a person, or an event that something is going to happen. Everyone has intuition to a certain degree but for me intuition it is largely informed by my past life and cultural experiences of being Cuban as well as the fact that my dad died five days before my 17th birthday. I am so much more intuitive than others who are my age because they have not had to grow up as fast as I did. These experiences have had a profound impact on my life, my practice as a nurse and my intuitive abilities in practice.

Helen states that because of these experiences she is very “open-minded and is nonjudgmental” because she is unaware of what her patients may be going through at home. She feels these qualities inform her ability to pick up on intuitive hunches from her patients as she “assesses them holistically and is able to understand them on a different level.” Helen states she “can’t judge anyone for who they are or what they are as she knows that addiction to drugs, alcohol, and abuse knows no boundaries.” She further added that she attempts to raise her daughter with these same values and perspectives.

Ethan’s definition of intuition is also informed by his life experience of his grandfather dying. Ethan recalled that:

When my grandfather died, I was there with him. Everybody had left the room and we were there alone and he looked at me and smiled and looked off and kept staring up and into the corner of the ceiling. Now when I am taking care of my patients, I recall that memory from earlier in life. I notice how a lot of patients that I have taken care of just prior to their death, for some reason, look up and
over to the corner of the ceiling just like my grandfather did. This informs my intuitiveness because for me it was a very spiritual experience being with my grandfather when he died and one that I will never forget.

Diane describes her previous life experiences of dealing with mental illnesses as informing her definition of intuition. Diane’s mother has a diagnosed anxiety disorder, her sister has a diagnosed panic disorder, her brother struggles with depression, her father has seasonal affective disorder, and Diane herself suffers from depression from time to time, especially while she was in nursing school. Diane discloses that:

Growing up around all of this and worrying about it, I think has led to experiences that I would not have had, had I never been exposed to mental illness before going into nursing school. I don’t think I would’ve gone into nursing school or psychiatric nursing for that matter, had it not been for these life experiences. As far as nursing intuition is concerned, because of these past experiences, I am able to put myself in my patients’ shoes and get to know them better. I can relate to what it is that they are experiencing and am able to pick up on their nonverbal cues that inform my intuition.

Lily describes herself, as being a very shy and introverted, but is quick to add that she feels this makes her more intuitive because she is “tuned in to what is going on around her.” Lily notes that her definition of intuition is:

A feeling or thought that I get, telling me that something is not right. Intuition allows me to tune in to see ahead and guide my nursing actions. I am very likely to tune in with what is going on around me. I sit here and just kind of take it all in and run it through my head. Even at a young age I was very receptive to what was
going on, but I never really got my ideas out there because I was so shy. I think that’s part of why I still take in a lot of what is going on around me because it is very important to me. I am able to take in cues from my patients and their environment, from my past life experiences and my past nursing experiences and make meaning out them in a way that informs my nursing practice.

Olivia notes that past life successes inform her definition of intuition. She shares that intuition is:

A way of knowing that everyone has, in a way being psychic . . . just having a feeling, a gut feeling that something is going on, not necessarily negative, it could be positive too. This is enhanced by positive and negative life experiences. For me scoring a goal in a soccer game or doing well on a nursing exam are all things, which build your self-efficacy and give you more confidence to believe in yourself and in your intuitions.

Olivia believes that these life experiences build you up and have a positive effect on how you feel about yourself, which can be picked up by your patients in the nurse patient relationship and thereby may either enhance or detract from the ability to be intuitive with the patient.

Allison agrees that life experiences affect ones intuitive ability. Allison believes that intuition is a “feeling or voice in your head that makes you feel uncomfortable about something” and admits that she thinks playing with her small nieces and nephews enhances her ability to be intuitive as she must focus on their nonverbal communication and the tone of their cries in order to determine what it is that they may want.
Rooted in Previous job experiences. Other participants also had previous jobs that they feel inform their intuitiveness. Jordan worked at a baseball stadium serving hotdogs, as a customer service representative at a local department store and as a bellman at a hotel. Jordan stated “I learned to relate to all sorts of people in these experiences.” Diane worked as a camp counselor, Linda worked as a dental surgical assistant, and Kylee worked for a short time as a bank teller. The commonality that all of the participants shared regarding these previous job experiences were that, as a result, they are now better able to relate and connect with people, enhancing both their verbal and nonverbal communication skills, which in turn informs their intuitiveness.

Other participants talked about health care related experiences that inform their intuitiveness. Allison admits that, “two brushes with cancer at the age of 8 and again at the age of 15 were the scariest times of my life.” Allison feels that “these experiences inform the way she empathetically and intuitively” relates to the pediatric cancer patients she cares for today. As a result of these experiences, she knows first hand what it is like to be scared and to not fit in with your peer group because of having to go for diagnostic tests and doctors visits.

Tina recalls previous job experiences that she feels make her more intuitive because they have fostered how she connects with others. Some of these job experiences have been working with Woman and Children at a homeless shelter, working in a group home for runaway girls, working in a psychiatric hospital, and lastly, working in a group home where mentally retarded men and women live. Tina feels that experiences in these settings have increased her intuitive ability because her “powers of communication
greatly expanded” when she worked with people who were non-verbal. Tina provided
the following example:

In a group home, where I worked, there were two autistic men that didn’t speak at
all. My first weekend there, I didn’t feel that I could do it. I felt like I was going to
go crazy. There was no one to talk to and there was no one talking back to me!
Shortly after this, I learned to rely on their nonverbal skills and by the end of my
time there, I never again felt that I could not communicate with them. I knew we
were talking, we were conversing, and we just weren’t doing it verbally. I learned
to understand what was important to them. The other challenge that these two
autistic gentlemen had was PICA, so they eat inedibles and they were totally
obsessed with food. So I quickly had to understand their need for food. I would
talk about food with them and in casual conversation, talk about cooking and what
we were going to have for dinner by using hand gestures. We taught them sign
language and interestingly enough we had more problems getting employees to
learn sign language then we had teaching severely mentally retarded people learn
sign language. It is all a matter of, do you care enough to undertake an intellectual
challenge and a difficult task in order to connect with somebody and some of the
employees clearly weren’t willing to do that.

Tina feels that this experience informed her intuitive ability in nursing because
she can apply what she learned when caring for patients who may be comatose, or
sedated. This experience serves as a constant reminder that not all communication takes
place on the verbal level, but rather, you can learn to understand what a patient may be
thinking or feeling based on nonverbal communication. She further explained that, if you
learn to connect with people on a “human to human level, it doesn’t matter if they are a wealthy CEO, a homeless person, or a person with mental retardation.” Tina emphatically expressed that, “we all have the same basic needs as human beings and they are to feel loved and protected, and to have our basic needs met as noted by the Maslow hierarchy of needs.” This, she feels, is what informs her ability to intuitively prioritize her patient care.

Many participants were able to link their high self-perception of intuitiveness with previous nursing or health related experiences. Kaitlyn, for example, believes that working as a laboratory technician and as an emergency medical technician while in nursing school enhances her intuitiveness. Tonya and Allison credit their increased intuitiveness to participating in a summer nursing externship program. This program is offered between the nursing student’s junior and senior year and provides them with the opportunity to work directly with registered nurses as a way to increase their exposure to nursing practice, and the profession of nursing. It provides the student with clinical experience above and beyond nursing school. Both Tonya and Allison stated that working with nurses and directly with patients increased their exposure to nursing and provided them with some background experience and knowledge that informs their intuitiveness.

Other participants such as Adam, Allison, Austin, Emma, Linda, and Tonya, worked as nurses aids during their nursing education which provided them with more experiences and a broader foundation on which to base their nursing practice as novice nurses. Adam believes his experience as an aid in the emergency department directly informs his experience of intuition. Adam feels intuition is a “holistic way of seeing, that
is not learned in school, but rather is based on clinical experience. It allows one to see the patient and the entire patient scenario very quickly, almost instantaneously.”

Linda recognizes that volunteering in a nursing home while attending nursing school has informed her intuitiveness. Because many of the geriatric patients were either “set in their ways” or had Alzheimer’s, Linda felt that she had to be very cautious when working with them and not be too pushy or strong willed. You really had to let your “intuition take over and allow the patients to take the lead.” Other patients, according to Linda, were “very insightful and shared many of their life stories that I was able to learn from.” For Linda, now as a registered nurse, this experience has helped her to foster many therapeutic nurse patient relationships. Linda experiences intuition as:

A gut feeling that you get when there are no other reasonable signs such as hemodynamics to point you in the right direction. …Experience, both in nursing and with people, is a huge part of intuition and along with that is the confidence in yourself to be able to express your intuitions.

Another experience in nursing that has informed the novice nurses’ intuitiveness is the experience of a critical or significant incident while in the health care environment. Congruent with the literature on critical incidents, these novice nurses explained critical incidents in their practice to be situations that had a profound impact on them as individuals and as nurses.

Ethan described a critical incident that he feels informs his intuitiveness. This incident occurred when he had just completed his preceptorship and he claims he will never forget it because he learned to trust his intuition and saw how using intuition really made a positive impact in his patient’s life. Ethan told the following story:
I had been assigned to a patient that was in the intensive care unit for a couple of weeks. I went in to assess him and noted his stomach to be as hard as a rock. I recalled that during shift report, the previous nurse told me it had been like that, but it was fine. I went in to the patient’s room and I asked the man when was the last time he had a bowel movement. He said, it has been a while, but they have been giving me Reglan and Dulcolax for more than a week and a half to help me have a bowel movement. I thought to myself, this isn’t right. You know it just, it didn’t look right and I knew it had to be addressed.

I started assessing him and found that he had a rigid board-like abdomen. A really firm abdomen but he denied having any pain. I looked back in the computer, and found that no abdominal x-rays had been taken. I didn’t know what was going on, but it didn’t look right. About, ½ hour later, I informed my charge nurse. We looked at his heart rate and found that it had been steadily progressing upward from the 90's to the 120's and his BP was slowly dropping but not drastically. Being a young nurse, right out of school, I’m thinking rigid board-like abdomen, increased heart rate, decreased BP, it is possible he is bleeding out in his belly somewhere. So, I ordered a hemoglobin and hematocrit level on him. These labs came back and they were fine but I was still not feeling convinced. Something did not feel right.

The patient continued to deny pain, but something wasn’t right. Again, I told my charge nurse, something is not right with this man’s belly. This isn’t right. I said, I am going to order a stat abdominal x-ray, right now I don’t feel we can wait until the doctor rolls around in the morning to come by and look at this
guy. I said, I am going to order it and have the radiologist read it right off the computer. The x-ray came back and the radiologist read it as possible toxic megacolon.

The doctor came in that next morning and just started chewing me out! He asked me what my role is at the hospital and who am I to be ordering x-rays. I said my role is to be a patient advocate and that is exactly what I did! He continued to chew me out that’s not my role blah, blah, blah. I said, I was trying to do the right thing. I am here to take care of your patients. I am here to be an advocate, but what do you think my job is I said? So we were talking, and I explained that when I came on this shift, I knew something, was not right with this man’s belly and I got to digging around and couldn’t find any x-rays and everybody had charted their assessment, a firm, nontender abdomen, distended for over a week!

The Dr. went in and assessed the man, the x-ray came back and he documented on the chart, possible toxic megacolon. I said, YES!!! Probably a good thing this man got a STAT abdominal x-ray this morning. The patient ended up going to surgery to have a double barrel colostomy. They took out quite a bit of his colon but that was much better than him becoming septic because of this brewing situation in his abdomen. That doctor ended up apologizing to me and now we have a good working relationship. This is something that I will never forget and it continues to remind me to listen to that gut feeling.

Olivia shared a critical incident where her nursing actions left a profound impact on her and as a result changed her practice.
I was giving Phenergan to an elderly person IV push, like the second day I started working as a nurse. The doctor ordered to give 25 milligrams, IV push now. I was very, very uncomfortable with that order, but I was a brand new nurse. I knew it wasn’t right but I gave it and sure enough my patient got dizzy and confused. She came out of it fine, but from that moment on, I always follow my gut feeling on anything that I do with my patients. Now I talk to the doctors and let them know how I feel. It just took that one time that made me feel like, my gosh I changed this person, and I knew that I shouldn’t have given that medication. It took a split second but I now question everything that I do and I question everything that a doctor writes. I will always remember this experience because I really changed my patient. I totally changed her level of consciousness.

In summary, from the novice nurse stories painting a portrait of the influence and modeling from significant intuitive mentors, their personal life and health care related experiences, it is evident to see how these factors have influenced their own unique contextualization and definition of intuition. The issue of intuition as “gut feeling” was understood by these participants to be rooted in different aspects of being human or a combination therein. This was a powerful feeling for them and one that they felt must be listened to as a way to positively impact patient care.

Accessing Intuition

This section describes the theme of accessing intuition and evidences how the novice registered nurses once they are relaxed both with themselves and with the health care environment, are able to reposition themselves in time and space as a means to
connect on multiple levels with the patient and access the full extent of their intuitiveness. The notion of spending time and being close to the patient (in the same space) were all important to the participants. The significance of the nurse patient relationship, patient provider variables, and “connecting” with the patient are highlighted here as factors that are important in picking up on intuitive cues from patients. Lastly, participants spoke of potential barriers to building patient provider connections and thereby limiting their intuitiveness.

*Developing Self Trust*

Diane shared part of a song with lyrics that addresses the need to “trust in my instincts and intuition.” For Diane, this song reminds her to “listen to and trust her intuition so it will enhance patient care.” Diane’s thoughts were shared by many of the participants. The need to trust oneself, as well as trust other health care professionals and have the “feeling of team spirit” was paramount to accessing and listening to intuition. The other area of significance was developing patient trust and feel that they trusted the novice nurse.

Some of the ways participants try to access their intuition to develop and foster their self-trust was explained by Helen. As a way to develop and access her intuition, Helen shared a photograph of a beautiful willow tree hanging over a small round pond. Helen talked about this place as being the place she likes to go to “just listen to her inner voice, enjoy nature, and just get a way from it all.” By going there and just relaxing, Helen feels this helps her to clear out all the other “stuff” in her life, listen and trust her intuition to focus on what is important. The issue of self-trust was mentioned frequently by these novice nurses. First, self-trust was imperative in order for the novice nurses to
listen to their intuitive hunches. Consistent with their definitions of intuition, many of the participants perceived that in order to utilize intuition they had to have years of experience. For some of the participants although they felt they were intuitive, they did not have the self-trust necessary to act on their intuitions because they were “just new nurses.”

Kaitlyn states she is a very intuitive person in both her professional and personal life. She further explained she has been a nurse for only 12 months, and although she feels very “in tune” with her patients, she admits that she doesn’t trust herself enough to feel 100 percent confident in making clinical decisions based on intuition at this point in her career. She stated that:

Spirituality to me is part religion, but I think it is also getting in touch with nature. I think it is a relationship that you have with family and friends or even animals. I think spirituality is more than just religion because it allows me to be confident in myself and trust my inner wisdom. I practice yoga, and that to me is spirituality. Taking that time to just clear my mind. I pray to obtain guidance to get through my shift and trust myself to do the right thing for my patients. By doing this I am better able to relate to my patients, connect with them and get to know them better all which enhances my trust in my intuitiveness.

. . . as I gain more experience as a nurse, I will fine tune my intuitive skills. In the short time I have been a nurse, I have found myself frequently saying…my gut tells me…or something isn’t right here…while sometimes it (intuition) is right and other times it is not. But when my gut is right it is a powerful feeling. My gut
just tells me certain things. But I like to discuss this information with another experienced nurse at this stage of my career.”

Jordan’s self doubt was clear as he informed me that he “questions himself very much.” He stated, “I just question things that I am thinking, I turn things around in my head a few times before I am certain about something.” Diane said it this way, “I do know I get certain, intuitive feelings but I don’t necessarily always trust them.” She further explained she is learning to trust intuition more based on the experience she accumulates. When intuition is all she has to go on she admits that she just “goes with it [intuition].”

Linda notes that as a new nurse, there are still things she asks questions about. She clarified that when she gets intuitive hunches and feels as though something is not right with her patients she goes to her preceptor before she would act on her intuitions. She explained she does this because she is still learning and needs to develop more trust in her. Linda stated that when she watches her preceptor she realizes how “some things just slip in under the radar” with her but with her preceptor he seems to “pick up on everything,” he is excellent. She also added that at this point in her practice it is not only that she doesn’t feel confident, but it also a matter of knowing where her boundaries are as a new nurse. She states:

Even though I am a RN, I know that licensure test did not instill upon me any bright light of knowledge and experience that I didn’t have before, so right now, I am just kind of bouncing my intuitions off of a more intuitive person, like my preceptor, without ignoring my own gut feeling about things.
Linda provided the following example:

This morning, my patient’s heart rate was in the 50's. I was questioning myself as far as whether or not I should give him his heart medications? My preceptor said to me, there is no way you are ever going to give this one medication today. Well, yes, I was wondering about this and my gut was telling me no I shouldn’t but, then I second-guess myself. Being new, I just don’t have the past experience to fall back on. I said well it’s (heart rate) in the 50's, it may go up above 60 and that is my only parameter. I questioned him (preceptor) I said you really think that medication will knock his heart rate down? He said, oh yeah.

Linda states she wasn’t sure if it was intuition her preceptor was using or if it was clinical expertise or a combination of both, but whatever it was, she noticed that he trusted himself whereas she didn’t trust herself. Linda has high regard for her preceptor because he is able to provide patient care without having to obviously think about his interventions. Linda feels that at this point she just “really has to think about how to intervene on behalf of her patients because she hasn’t been around it (nursing) enough.”

Although Diane verbalized that at times it is difficult for her to decide if what she is feeling is the result of good assessment skills or intuition, she still runs her thoughts past someone who has more experience. Sometimes, she admits, because “I am so new, I don’t know that I see intuition in practice much and am trying to adopt a lot of intuition in my own practice. I just need to know if I am thinking along the right lines so I can develop more trust of myself.” Diane feels that, as she confers with other nurses, she will gain more confidence in herself and be more willing to base her decision-making on intuition.
Trusting Appropriate Patients and Professionals

Tina describes one of the most important issues for her related to intuition is the trust from her colleagues. She says when she is “surrounded by a team of people that know her as a good nurse and trust her, she finds herself to be more intuitive.” On the other hand, when she is pulled to another nursing unit where she does not know the staff and they do not know her she finds herself to be less intuitive. Tina explains:

When I am on my floor where I am trained and where I work with people that I am used to working with and we have a good working relationship with each other I feel I am more intuitive. When I am pulled, I don’t have that same confidence, because I am in a totally different area and I don’t know my co-workers. I try to have the inner confidence and tell myself, you know, Tina you are a nurse, whether you are on this floor or another floor and the assessment is the same and this is the same and that is the same, etc… but I have to talk to myself more when I am in an unfamiliar situation. I tend to ask more questions of the nurses when I am on a different floor that I am not as familiar with.

Linda and Ethan also agree that their relationship with their colleagues is very integral to the acting on their intuitiveness. Linda states that having a preceptor and staff that “allow and encourage intuitive thoughts to be expressed is a big plus, knowing that I can go to them and say, hey this is what I am thinking, can I bounce this off of you … is such a positive thing” and in the end enhances patient care. Ethan notes that his co-workers are just phenomenal. He went on to say that he “never feels like he is by himself.” He notes, “even when I was done with my orientation, I was never by myself. I remember the first time a patient died on me, I turned around and there seven other
nurses in the room with me, supporting me and helping me to get through it and helped me to prepare the patient for his family to come in.”

Allison, Olivia and Kylee describe what it is like to work with staff who are not supportive. Allison told me about an older nurse who is a “real stickler for rules” and consequently Allison perceives her to be more difficult to work with. She doesn’t do as much of the explaining to newer nurses she just “drills you on things”. Because of this Allison is a “little more scared to approach her” than she would the other nurses just because she tends to drill you on things instead of explain it to you. She expects you to know it and if you don’t she will drill you on things. Allison says she would never go to her with an intuitive hunch.

Olivia finds that “nurses are so mean to each other” and finds this to be very sad because we are a “caring profession, yet we treat each other mean.” She feels that when she is working with nurses who she perceives to be mean, she will not be as likely to discuss her intuition with them.

No matter what the setting, several participants spoke about “clicky nursing teams” and how they don’t foster intuitiveness. The novice nurses did not feel supported and trusting of their colleagues in this type of environment, whereas nursing teams that truly have a team concept of “we are in this together, I will help you and you will help me” fostered intuitiveness in this group of participants. As Katie stated, “the attitude that, ‘I have my own patient group and I’m busy with mine, you need to deal with your own patient group,’ affects intuitiveness very much.” Many other participants confirmed that when you feel like you are a part of the team, you are more comfortable and confident with yourself, because of the feeling that everyone will back each other up.
When this kind of environment is not present, the novice nurses felt as though they were an “outsider” and spent more time trying to figure out what the other team members were thinking of them as a novice nurse. Many also reported feeling more insecure.

All participants verified the importance of teamwork and being able to trust your colleagues. For some it was so real that they allowed it to inform their job selection decision. Jordan reported, as a nursing student, “when I was in clinical if I sensed that there was not a team concept present on the floor I would not even consider interviewing there as a graduate nurse, because I would never want to work there.” Olivia recalls that she “selected the night shift on a particular unit because the staff worked more cohesively as a team.” She admitted she could connect with the staff and felt as though they trusted each other.

Trusting colleagues was important in order for the novice nurses to articulate what their intuitions were and act on them without the fear of ridicule. Though participants spoke of self trust and trusting nursing colleagues, deeper exploration of the topic revealed that patient trust also played a role in their intuitiveness. As they became aware of their “gut feelings,” participants reported several issues related to patient trust that had significant meaning to them as a new nurse. First, many shared that, when they gained their patients trust, they felt more intuitive because they were more relaxed in the nurse-patient relationship. Second, because you don’t always have all the information about a patient’s situation, having their trust allows them to open up and tell the nurse more about what they are feeling and concerned about. Third, they felt the patient is more likely to be compliant if they trust the nurse and believe in what they were teaching. Karen explained it this way:
When I have my patients’ trust, I am better able to go with my intuition, because I feel like I get more information from them. This helps to kind of back-up what I feel a lot of times because it just makes that churned up feeling inside more concrete in my mind. Also, the better connection with the patient I feel that if no one else believes what I feel is going on, if the patient trusts me they will do what I asked them to do. Usually there is a better outcome then if they don’t trust me or don’t believe me. Even if no one else believes me, if the patient trusts me I am able to implement the necessary steps to intercept the situation and improve the outcome.

Repositioning Oneself in Time and Space to Connect with the Patient

When accessing intuition the novice nurses require time to place him or herself in a space where they feel they are able to be more intuitive. Either they would spend time “standing at the foot of the bed,” or “siting at the patients bedside,” thereby placing themselves at an equal level with the patient. Tina described her strategy as “tinkering around the room” in order to be present with the patient for a longer period of time. Many of the participants were clearly attending to the spatial dimension in a new and different way to better connect with the patient. Many of the participants noted the importance of “taking in everything” (Adam), “being receptive to all data” (Jordan), being “in tune with all the cues that are coming in all the time” (Linda), and or “maintaining eye contact” (Lily).

Observing. Participants began their stories by thinking carefully about previous patient care interactions. Ethan notes the importance of “standing at the foot of the bed” observing his patients. Ethan explains the first thing he does after getting report is to walk
into this patient’s room and “stand at the foot of the bed.” He believes that when you walk into a room you can really get a sense of what is going on just by looking at your patient, standing at the foot of the bed and just looking at him. This is probably one of the best assessment tools you could do. He recalls a situation that occurred when he was in his first month of working as registered nurse:

I walked in a patient’s room, I was standing there at the foot of the bed and I thought he does not look right, something is not right here. I didn’t know what it was, I didn’t understand my feelings, but I just looked at him and something just didn’t look right. So I went and got my preceptor and had her come in and we got to digging around and discovered what it was. Somebody had put the tracheostomy collar in incorrectly. The patient needed a size # 8 and they had placed a size # 6. The patients’ oxygen saturation was fine, the vital signs were fine, but something didn’t look right, I couldn’t put my finger on it.

Just by walking in the patient’s room and standing there for several seconds, Ethan notes he is able to survey the room and the patient and not only pick up on the patients “physical well-being, but their emotional well-being too. You can get a sense of intuitiveness that something is not right with them.” He also noted that he can pick up on the patients color, whether or not they are maintaining eye contact, if they are alert, the depth of their breathing, facial grimacing, and body positioning. Another example Ethan shared was when he went into a room to assess a patient who had just come up from the Surgical Intensive Care Unit:

I went into a room and just kind of stopped at the foot of the bed and looked. As I was standing there it seemed as though the patient just got out of himself and just
totally looked beyond me. I had this feeling that he was going to code and I walked out and told the rest of the staff that he was going to code. I said he is going to code tonight and it is going to be fast, he is going to drop his heart rate and it is going to be quick. I didn’t know why I felt this way other than that strange look I got from him when I was standing at the foot of his bed. I wasn’t out of the room 5 minutes and his heart rate went from 60-70's and down into the 20s. We coded him and we were able to bring him back to life.

Listening. Some of the participants got a feeling that their patients wanted to tell them more, but for some reason they were reluctant to do so when the nurse initially did the assessment. As a way to allow the patient more time and perhaps encourage the patient to talk, some of the novice nurses would “tinker around the room” to be present with the patient for a longer period of time. Tina states that she would empty the trash cans or fill the water pitcher, or straighten up the room just to be present longer and give the patient an opportunity to talk. Tina noted that oftentimes the patient would then open up to her and talk. Tina also likes to ask open-ended questions instead of yes / no questions. She believes this allows the patient to talk to her more.

Karen stated that by “tinkering around in the room” she can also observe how the patient interacts with family. Karen listens to patients as they talk on the phone, talk to significant others or when they talk with other members of the health care team. She was quick to clarify that she isn’t trying to be nosey, but rather she picks up on her patient’s concerns, issues they don’t understand or questions that they have. She further noted that even though this interaction is not direct interaction with her:
I am around hearing things, it is just a matter of taking the whole situation in and being observant and caring enough to get involved. I think, some nurses kind of go through the motions, but they could care less about patients. They don’t pick up on things that I think I’m able to pick up on because they don’t spend time in their patients’ rooms. I care and I want to take care of the patients’ physical needs, emotional needs, and I want to take care of them spiritually.

Adam recalled a situation when his patient’s only symptom was anxiety. Her heart rate was slightly increased but she didn’t seem right and he kept asking himself what is going on, what am I missing? Every other assessment tool was fine. The blood gases, blood pressure, level of consciousness, respiratory rate and lab work all were fine. He called the doctor in to her to inform her of how he was feeling. She said she might be in heart failure. Adam was still was not satisfied and felt that this wasn’t the case. He assessed her further but again found nothing tangible. At 2:00 in the morning, after Adam kept insisting that something was “not right” a ventilation / perfusion scan was ordered and he patient was diagnosed with a pulmonary emboli. Adam affirms that “picking up on those nonverbals and body language is so important. Looking at the patient holistically is imperative.” Adams quick action and persistence to get further diagnostic tests, even at two in the morning were credited for saving this patients life.

Ethan also attempts to pick up on everything and hear what is not being said by increasing the amount of time he spends in his patients rooms. He emphasized I try to be more observant of the subtle changes, and listen for little subtle cues, not just the big changes that take place. I try to stay very in tune to the patient
needs. I spend a lot of time in my patient’s room. When I was going to nursing school, I didn’t know I wanted to be a critical care nurse. When I was in clinical I always did my paperwork at the patient’s bedside, oftentimes sitting in their doorway. I wanted to be near my patients and I wanted them to know that I was right there.

Tonya reaffirmed what the other participants had said by summarizing that she feels like “so much can be said without ever having to say any words”. She further explained that she is very in tune with the patients’ affect and eye contact. When she is asking them questions she “zeroes in on their body movements, smells, facial expressions, and intonations in their voice as a way to gather nonverbal information.” She also stated she feels being in the room is imperative to good patient care.

**Touching.** Lily notes that while maintaining eye contact is important, it is also important for her to “sit on the edge of the bed and touch her patients.” Lily feels that this helps her to “connect with her patient’s body language and allows her to be closer to read people for comprehension” rather than “standing in the doorway which gives the patient the message that you are in a hurry to go.”

For other participants it was a matter of therapeutic communication, which they felt enhances their ability to be intuitive. By sitting on the edge of the bed, being at the patient’s eye level afforded these nurses the opportunity to ask more questions and give the patient the idea that they were fully present, listening to, and focusing only on them. Tonya states she could “probe a little more and make the patients feel that they were the most important thing to her right now.”
Tina notes that she likes to:

Pull up a chair and sit in my patient’s room, instead of towering over patients like you are superior to them and they are inferior. By sitting with them, I am at their eye level. Sometimes I even kneel beside their bed. I like to touch my patients, to see if they pull away or if they are receptive to my touch. I like to hold their hands and just let them feel safe. This really helps my intuitiveness, because it is a way of connecting with them, and it is an act of caring.

Tonya agreed with this and states that “when she sits down with her patients she is fully present and truly with them in all realms of nursing.” She clarified this to mean emotionally, spiritually and physically. Three of the participants stated they preferred working night shift rather than day shift because nights provided them the opportunity to spend more uninterrupted time with their patients. The participants perceived the amount of time to be crucial to picking up intuitiveness.

The above nursing strategies either, standing at the foot of the bed, tinkering around the room, or sitting on the edge of the bed were incorporated by these novice nurses to enhance their connections on multiple levels with their patients and ultimately inform their intuitiveness. These participants went on to expand upon the notion of connection by identifying patient provider variables that either add or detract form their intuitiveness. Kaitlyn states that “when nurses connect with their patients and build relationships with them and their significant others, their intuitiveness is enhanced.”

Olivia feels that her nursing intuition is “just stronger” when she “forms a bond with the patient and their family.” Ethan concurs with Olivia and notes he “feels especially pleased when he makes a connection with a patient.” He facilitates this
connection by going in to his patient’s rooms at the beginning of his shift and informing the patient that he is Ethan and he is going to be the registered nurse for the next 12 hours. He reassures them and lets them know that he will be keeping a close eye on him or her.

Jordan thinks connecting with a patient is very important. He shared his thoughts regarding this:

Connecting with a patient or building a rapport with them is dependent upon how many days you have spent taking care of the patient. It is nice when you take care of someone for a couple of days, like 2-3 days in a row. You get to know them a little better and I think when you do have a broader knowledge of the individual patient, you are able to anticipate needs and more able to understand in an intuitive way, what is normal for them and what is not normal for them.

Diane shared how connecting with her patients both verbally and nonverbally is paramount to her intuitiveness. Working on an in patient psychiatric unit she admits she often relies on “nonverbal signals to intuitively identify early signs of escalation before the patient gets out of hand.” She will observe the patient’s pacing strategies for any changes. She will “key in to the patient for any slight evidence of irritation.” In addition, she will “listen to their verbal language that they use, recognizing that the increase usage of cuss words may signal escalation. She also assesses if the patient seems to be responding to internal stimuli such as auditory hallucinations. Diane was quick to add that despite these subtle cues, “oftentimes you just get an intuitive feeling that something is not right. The patient may have a look about them or they may just look threatened.” If this feeling occurs she will observe the patient more, sit with them and attempt to calm
them down, talk with them to further identify what is going on and lastly, if needed work on administering a medication.

Patient Variables that Affect Intuitiveness

Despite the efforts made by the novice nurses to position themselves near the patient (either sitting at the bedside, standing at the foot of the bed, or being in the patient’s room) in order to foster the nurse patient relationship and enhance their intuitiveness, the participant’s also recognized various patient provider variables as channels that may positively or negatively affect the nurse patient relationship. Consequently these variables may either enhance or detract from their intuitive ability.

Patient provider variables or channels were noted to be openness of the patient, mental status of the patient, and cooperativeness or receptiveness of the patient. Overall the majority of participants felt that if they established a therapeutic rapport with the patient they had the ability to be more intuitive.

Kaitlyn referred to patients as being “open or closed.” She states, “open patients want to be read, they want someone to understand them, whereas closed patients, do not want to be read by others and don’t want their fears to be known.” Kaitlyn feels that with open patients it is easier to intuitively pick up on their facial expressions and tone of voice and then be able to act on her gut feelings. Linda also referred to situations where her patients were open, allowing themselves to be read by the nurses and when they were closed and didn’t really want to be understood or talked to. Linda said she would much rather care for patients who want the nurse to help them than a closed patient who isn’t necessarily interested in what she has to say. Linda states that she ends up spending so
much time trying to figure to what it is that the patient wants or needs when they are closed.

Jordan clarified that when patients are open, he can read their body language, facial expressions and hear what they are saying even though they are not saying a word. He further explained that:

In our society individuals are trying to be so politically correct that they are not saying what they are truly feeling, they are closed, because they are afraid they are going to be politically incorrect. I find it much more challenging to assess these kinds of patients based on my intuition, because they are closed.

He added that building rapport, a trusting relationship with someone is dependent on whether they are open to discussing things with you. As a nurse, he stated he often feels like there is something going on with his patients that he can not see on the outside. He further revealed that making connections with his patients is particularly challenging for him if they are nonverbal, handicapped, have a tracheostomy and are unable to really communicate, speak a different language, or if the patient is from a culture that is very nonverbal. Jordan states,

Where I work, we see some patients from Asian cultures they are Vietnamese or native Laotian and tend to be more quiet and reserved. There are also some Hispanic migrant workers that don’t speak any English at all, while others speak some broken English or have family members that interpret English who are with them. From my experience the Hispanics tend to be kind of like the Asians, more reserved and quieter, especially a woman. In the Spanish culture, the men do the speaking. So it interesting, if you have a Hispanic female patient who has a
husband who is present in the room, it is almost impossible to connect with the patient because the husband will do all of the talking. Sometimes me being a man asking the questions make a difference as well. Perhaps they are more open talking to a Hispanic female. So, I run into cultural barriers that affect my ability to be intuitive. As far as African Americans, they tend to be outspoken and are very verbal so connecting with them is not as challenging for me.

Other novice nurses revealed more serious issues with patient provider variables that inhibit intuitiveness. They vividly described barriers and how challenging it is to pick up on intuitive hunches when the patient is sedated, mentally challenged, uncooperative and / or manipulative. Other participants questioned whether too much experience as a nurse could limit their intuitiveness.

Ethan states, patient provider variables that detract from his ability to be intuitive are those patients that are sedated or given paralytic agents because they are so heavily medicated. Lily feels similarly to Ethan and reports that she finds it very challenging to connect with patients who have dementia. “It throws your whole assessment out the window because you can’t get a history from them, they are not oriented, and they can’t even tell you what time of day it is. Not to mention the fact that their facial expressions and body language are sometimes inappropriate. When caring for these kind of patient I have to turn off my intuition.”

Conversely to how Jordan and Ethan feel, Austin and Tina rely more on their intuitiveness when caring for patients who are comatose or mentally challenged. They feel that this is because the patient can not speak for himself or herself so they must be
more in tune to nonverbal communication techniques and really hone in on their intuitiveness.

Emma revealed that she finds it hard to pick up on her intuitive hunches when patients are “argumentative, combative, and complain all the time and are just basically unwilling to listen to nursing advice.” Kylee states she feels challenged when “caring for patients who are drug seekers in the Emergency Department.” Although they are argumentative at times, she finds them to be more manipulative and therefore her intuition is telling her one thing and the patient is telling her another. These same patients, Kylee notes are also the ones that have repeated visits to the Emergency Department. She further clarified her thoughts with the following example:

Some patients come into the ED complaining of back pain, time and time again. I have to listen to my intuition to tell me is this real back pain or are they seeking drugs? Do they really need that Demerol? Or are they working the system? Are they trying to get out of work? It scares me because I think one of these times it is going to be the real thing and because they have cried wolf so many times no one is going to listen to them. My intuition has guided me in many situations like this to spend more time with patients to find out what it is that they really want and try to provide them with holistic care.

Emma states that it is only after she connects with her patients that she feels she is able to provide them with the best possible care. When she connects with her patients she believes she is then “able to cue into what they are feeling and she can get down to the real reason why they are not feeling well.” Lily feels the same way and describes that she “uses her intuitiveness to tune into her patients feelings.” She “forms a connection with
her patients to try to figure out their attitudes and feelings.” She stated that “you can’t always go by what the patient is saying because they will say, ‘I am doing fine, I feel great but in reality they are having a major heart attack!”

Four of the participants questioned whether having more experience as a nurse actually helps or limits ones intuitiveness. While the majority of the participants seemed to feel that having significant experiences both in nursing and life enhances intuition, as confirmed by Linda who believes that “experience is the fuel for intuition,” other participants such as Ethan, Emma, and Kylee felt that having experience may actually cause the nurse to rely on their intuition less. They felt that as new nurses, they had to rely more on their intuition because they have less of a repertoire of experiences to rely on for guidance. Ethan states that “certainly I rely very heavily on intuition because I lack the experience to fall back on that other veteran nurses have.” Emma believes that if “you have lots of experience it turns off your intuition.” Kylee added that while she has “seen some very experienced nurses use intuition, others do not.” Furthermore she notes that nurses with “very little experience, like myself, use intuition all the time.”

The positive use of intuition by the novice nurses in practice was clearly evident in their very descriptive clinical scenarios. All of the novice nurses in this study recognized the importance of trust on many different levels including trusting self, trusting others, and trusting patients, as a way to facilitate intuitiveness. Additionally, the novice nurses repositioned themselves as a way to be centered with the patient and connect with them on a person to person level in order to pick up subtle cues that the patient may be revealing.
Outcomes of Intuition in Practice

This first part of this section will describe the patient outcomes related to intuition in practice and will once more highlight stories the novice nurses shared with me regarding their practice. The second part of this section reveals how the novice registered nurses navigated power relationships with other members of the health care team in order to get around issues they felt were constraining their ability to act on their intuitive hunches. Lastly, the third section evidences how novice nurses creatively moved beyond the identified limitations of power relationships and limited resources that they experienced in practice.

Guiding Patient Decision Making ~ More than Just the Obvious

The novice nurses were quick to point out positive outcomes of using intuition in their practice. For some participants, intuition allowed them to see “more than just the obvious” that guided their decision making, while for others, intuition enhanced their nursing assessment. Tonya described it this way: “Intuition allows me to see everything, and hear what is not being said.” Intuitive knowledge influenced their decision making mainly in uncertain, ambiguous and perplexing situations. Many of the novice nurses talked about the importance of providing holistic care, inclusive of body, mind and spirit and felt that their intuitiveness enhanced holistic care.

For some of these novice nurses, their intuition informed them that there was more going on with their patients than “just the obvious.” The novice nurses exemplified how intuition guided their decision-making regarding patient care particularly in situations where they felt perplexed or uncertain as to what to do for their patient. This intuitive feeling prompted them to gather more patient data either by asking more
questions, doing a more thorough patient assessment or “digging deeper” as it was described by Helen and Allison. Others were prompted to validate their intuitive feelings by checking with a colleague or a peer.

Kylee described a situation with a young 20-year-old girl who presented to the ED with vaginal bleeding. From the start, Kylee felt as though something was just not right, there was more going on than just the obvious” this feeling prompted her to further question the patient. Indeed as a result of further questioning, she was able to get to the bottom of the vaginal bleeding. She shared:

I had a 17-year-old girl come in to the ED with vaginal bleeding. I was still on orientation when this occurred so I had only been working about three months. During this short time I had cared for many young girls who come in saying they are having extra vaginal bleeding. We usually end up diagnosing them with dysfunctional vaginal bleeding and discharging them. This time felt different though for some reason. The physician and I did a pelvic examination. The patient’s mother wanted to stay in the room to comfort her daughter. I kept getting this feeling that the patient wanted to tell me something. But I felt that she couldn’t because the doctor was just like, we will do a quick pelvic examination discharge her. I also thought that maybe the patient wasn’t talking to me because her mother was in the room. So I said to her mother, your daughter is fine, her hemoglobin and hematocrit are fine, so why don’t you go and get a drink. At that point, I walked back into the room with the patient and I simply asked her to tell me what was going on. The patient started crying and informed me that she had just had an abortion four days ago. I learned that it was because of the abortion
that she was bleeding and not just because she was having an abnormal period. I was able to inform the ED doctor what I learned. He then ordered a sonogram, which found that she had retained placental parts in her uterus. As a result of this, she needed to have a dilatation and curettage of her uterus.

When I asked Kylee to clarify how she could tell the patient wanted to say something more, Kylee replied it was because “she just wouldn’t look me in the eye.” Many times nonverbal cues from the patient were picked up on by the nurse, which prompted them to further investigate their patients.

Linda shared a patient scenario in which the patient’s hemodynamic monitoring data was showing one thing, but she as the nurse, was definitely feeling something else was going on with the patient. She recalled the physicians were treating the patient as if she was in congestive heart failure based on her hemodynamic numbers and the because she had +4 pitting edema. But Linda felt as though they needed to treat her for septic shock. Linda says:

The physicians wanted to do a heart catheterization and I wanted to do a CAT scan of the sinuses because the patient had green secretions coming out of her ears, simply because she had a nasogastric tube. I felt that she had sinusitis and she was so sick because she was septic, yet the doctors were treating her based on her numbers and I was looking more at the patient and listening to my gut feeling.

[I asked: Were there really secretions coming out of her ears?]

Linda replied, honestly, it was coming out of her ears! So we did a heart catheterization and when that turned out to be fine we later did a CT scan of her sinuses. Guess what it showed. SINUSITUS! Consequently they took out her
breathing tube and did a tracheotomy and removed the nasogastric tube and put in peg tube. But all of this would have occurred a day or two sooner if they would have just listened to me and not treated the numbers but treated the patient. I don’t know, for me it is a combination of intuition and plain old common sense. I realized there was more going on than just the obvious.

Allison reflected back on a young boy she cared for with acute myeloid leukemia (AML) and said:

I just recently took care of a boy who has AML, who had just relapsed. He started coughing and his mom was saying that he wasn’t feeling very good and just wasn’t acting right and was sleeping a lot more. At first we just thought his blood counts were low and transfused him with some blood and some packed cells. But he continued to not feel right. Every day he was spiking a low-grade temperature, not anything awful, but just, a low grade temp. I kept telling the docs, you know, something is just not right with this kid. We were doing chest x-rays and clinically his lungs sounded fine, he didn’t really have any issues. His breath sounds were a little decreased from time to time but he was still acting okay. Not as active as he normally would, but he was very neutropenic so the doctors attributed it to that, but I wasn’t so sure. In a few days he started to really get bad and kept spiking temps. The docs put him on all sorts of antibiotics and he was still spiking temps through the antibiotics. Later we came to find out that he had a fungal infection in his lungs and that was the reason he wasn’t responding to the antibiotics. We then put him on anti-fungals and he started to improve. You know, there wasn’t anything clinically that was standing out at me, but just little things,
just this gut feeling that we were missing something. Myself and the other nurses that cared for him kept telling the docs that he just wasn’t acting like himself (because we had all known this boy from previous admissions) and something was wrong. Thank goodness we get to know the patients and the family so well, I mean, everybody knows each other because they are there for a long time.

[I clarified: Was his chest x-ray clear?]

Allison replied, They had found, a lesion in one of his lower lobes, but nothing definitive. They did a lung biopsy it though and found it to be a fungal infection. But the pulmonologist did not want to do it for a while because he was so neutropenic and his platelets were always off. They didn’t want to do anything invasive. But the other nurses and myself kept insisting that the patient wasn’t himself. So then the pulmonologists agreed to do a lung biopsy.

Tonya shared an example of how her intuition guided her decision-making to encourage the midwife to order further diagnostic tests, which ultimately lead to her patient being diagnosed with Typhoid fever. Tonya stated:

A 29-year old woman that was Gravida 3, Para 2 came in to the clinic. She was six months pregnant. She came in with this horrible fever requesting Tylenol. She further stated that she didn’t feel the baby moving as much. I put her on the monitor because she was light-headed. I started intravenous fluids and the baby started to get very, very tachycardic. The fever eventually broke but the baby’s heart continued to be in the 200’s. The baby’s heart rate went down to 160's, 170's, and was reactive to the mother’s movement. The mid-wife I was working with pretty much passed it off and said she is fine, she is fine. The
patients temp had broken from 104, and went down to 100.5. I told the midwife I really feel uncomfortable with this. The midwife said, the fever broke, she just needs to keep taking the Tylenol, she’s fine. I said, why don’t we draw a TORCH panel (which checks for five different infectious diseases that are pretty common, that women are really susceptible to during pregnancy). I explained that I felt there was something going on, it is just not sitting right with me. The mid-wife continued to say, no she’s fine. We kept the patient several more hours to monitor the temp and the baby’s heart rate. But despite this, I still felt very uncomfortable about something. I asked the midwife what kind of follow up she wanted to do and the she said we don’t need any follow-up. We can call her tomorrow and see if her fever is still down. Again, I felt this uncomfortable gut feeling about leaving the patient go. Okay, alright and I looked at the patient and said how about just in case, why don’t we have you sign a record release to get labs drawn, check into the hospital, just in case. She said okay that’s fine and as I am sitting there the baby started to get a little tachycardic again and the fever was starting to creep up again. The patient at this point was insisting that she was fine. I kept telling myself that everything was going to be okay, but yet for some reason, I knew that it wasn’t going to be. I said to myself, look she is a very educated woman, and she is very in tune with her body, and she understands that if her fever goes back up to 101 no matter what time it was, she was to go straight to the ED. Well, I found out later that the woman had typhoid fever. She ended up in the hospital for two weeks and was very sick. The baby had fetal distress and consequently had to be delivered by c-section at 35 ½ weeks.
All participants confirmed that during the process of intuitive decision making, they were aware that they acknowledged and processed their feelings and then put them into practice by acting on them. Jordan acknowledged, “If you don’t act on these feelings they are meaningless.”

Just as the novice nurses utilized their intuition to enhance their assessment, provide holistic care, and guide their decision making, they also used intuition to be sure that their patients were safe. In their stories, the novice nurses shared how they especially valued their intuitive hunches when they sensed information related to the safety of their patients. Tonya shared another powerful patient situation regarding her intuition and her patients’ safety as well as the safety of her unborn child. Tonya shared:

A 21 year-old female, Gravida 2, Para 4 came into clinic with a very strange affect, a very flat affect. She was 38 weeks pregnant. I had been out to her house previously to do a need’s assessment because we have such a poor population. She lives in subpar housing, no running water, no heat or electricity, she is very poor. Often times with our poorest clients, they do have a flat affect and that’s normal. But there was something different this time I was sensing. She had a very flat affect, she was absolutely flat. You could tell she had not bathed, she was just really disheveled. I kept hearing in my head, something is not right here. I asked, how are you feeling today. She said I am fine. I asked really, how is your family? She replied, they are fine. How is the baby? The baby is not moving. I asked, oh, what is going on? And she said, everything is fine, everything is fine. I asked again, when did the baby stop moving? She said last night when it happened. I inquired what happened and she said, oh, I just got in a fight with, with my
mother-in-law. I asked, do you want to talk about what happened last night? In the end it turned out that she had tried to commit suicide after she and her mother-in-law had a fistfight. She had taken a ton of, just a whole bunch of different medications. She had taken the pills really early in the morning and she came to the clinic because she was getting scared. I was so glad that my intuition was telling me to talk to her and ask her more and more questions. I am pretty sure that had I not been so persistent she would not have said anything. The baby was delivered by cesarean section the next day and almost died.

Holistic Patient Care (Body, Mind and Spirit)

The novice nurses shared many stories of how intuition enhanced their nursing care in a holistic nature. For these nurses, they not only took care of the patient’s physical needs but additionally, they were able to attend to the patient’s psychosocial and spiritual needs.

Helen shared the following story about a patient who she cared for in the intensive care unit whom she will never forget. Helen was able to get her patients family involved in the patient’s care and more importantly during a very acute time she spent quality time with the patient praying with him and listening as he talked about his estranged son who he hasn’t talked to in ten years. Helen’s intuition encouraged her to spend the time with this patient even though she realized she had to get him to the operating room immediately. Helen stated:

I will never forget him. He was just having this awful amount of rectal bleeding, to the point that he would evacuate a liter of blood from his rectum. The gastroenterologists on the case didn’t seem to be responding the way I thought
they should for the severity of the bleeding. My shift started at 7:00 and at 7:30, he had a bleeding episode. He got very hypotensive and very anxious, diaphoretic, the whole nine yards. I called the gastroenterologist and said, something is not right, we need to do something about this right now! He ordered a STAT-tagged RBC scan. The patient had hemoglobin of 6.8 and I was constantly hanging blood to keep it at that level. I took him down to the nuclear medicine department and the entire way down there I just kept praying please Heavenly Father do not let this man code. The patient was laying on the liter and he wanted to talk about his family. His blood pressure was very low and I felt very uncomfortable, but yet my intuition was telling me he wants to talk about his family. His blood pressure was getting close to the 60's and his heart was up to the 140's, the whole nine yards. He is lying there talking to me about his son who he hadn’t talked to in ten years, he outpoured all this stuff to me which, I consider myself to be very privileged to hear. I was wondering if the patient sensed that he was going to die. He said, I don’t know why I am telling you this, I never told anybody this before. So then I was really thinking to myself okay, he is going to die. Then he said to me, I am going to die aren’t I? I said we are doing everything that we can to prevent that.

It ended up being a bleeding arteriovenous fistula in his abdomen. I don’t know how many units of blood and FFP I had given him and then rushed him emergently to the OR at 3:00 in the morning. We prayed together as I was pushing him through the operating room door. I really didn’t think he was going to make it out of surgery. I hoped and I prayed, but I just had this awful feeling
that, you know, something was going to happen. He said to me, I am holding you responsible when my wife comes, tell her I love her. I was so thankful that I provided this man time to listen to what was on his mind and relieve his spirit. I was bawling on the way back to the intensive care unit from the OR. I passed the surgeon who had been yelling at me the whole night because I kept insisting that he be more aggressive with this man and he patted me on the shoulder and he said you did good. I learned later that he did make it out of the operating room but died the next day, when I was off. When I heard about his death, I was so glad that I had given him the opportunity to talk and that I listened. I also knew that I did everything I could have for this man. Late I called his wife and was able to tell her what he had shared with me, which I know brought her comfort in her time of grief.

Tina when caring for her patients, although they come in with a complaint such as chest pain, she oftentimes listens to her intuitive hunches and realizes that the pain was initiated by another life event, frequently, being a fight with a significant other. Tina explained:

When I get this uncomfortable gut feeling I become fearful as to whether the patients are soul searching, whether they are just not feeling well, you know, what is it really that is making them not feel well. A lot of times I treat them for something that is at the root of their pain. I will ask, why do you feel you are having this pain? They will say, well, it is not really my chest. It was my chest, but now it’s my back and it started because I had an argument with my wife. One time I just had a feeling about this one patient. He came in with chest pain but just
the way he was looking at me, I could tell there was more to it than that. I began to ask him about his life and he told me his wife just left him for another woman! I was then able to get counseling involved to help him deal with this more appropriately. We also investigated the heart pain but found that everything was clear with his heart.

Kylee shared a story involving a nursing home patient she cared for in the emergency room. Kylee admits that when patients are stereotyped into categories this really bothers her. She explained:

This patient came in to the ER because the nursing home staff felt that she was not her usual self. The physician looked at her and wasn’t going to do any kind of work up because he didn’t think anything was going on. He looked at the nursing homes chief complaint and said this is how the patient is. It just bothered me. I had this feeling… I kept asking myself what if this isn’t the way she always is? She wasn’t talking or looking me in the eye or doing much of anything. I just kept getting this feeling what if she isn’t like this. I looked on her chart and located her daughter’s phone number. I called her daughter and had her come in and asked if this is the way her mother is usually. The daughter arrived a short time later and said no this is not how she is normally. I went back to the doctor and told him. We then called the nursing home and gathered more information regarding the patients’ status. The doctor did order a CAT scan. The CT scan showed some atrophic changes. So it didn’t change her care at all but at least I was then able to turn off that intuition in my head that kept telling me that something more was
going on here. I know I did what I could for this patient and treated her holistically and not just like another nursing home patient.

Diane shared a similar situation where her intuition was telling her that one of her patients just didn’t seem right. Consequently they retained him in the hospital a bit longer and realized that by doing this, they prevented him from a fourth suicide attempt. Diane stated:

I had a patient recently who came on our psychiatric unit with some anxiety problems and abnormal paranoia after overdosing at home. We had him on our floor for about a month and he seemed stable so we were getting ready to send him home. All of a sudden, I kept hearing this voice in my head that said, no he is not ready to go home! I did not understand why I was feeling this way and why I didn’t verbalize this feeling at the discharge meeting that I had just attended on the patient’s behalf. There was just something about him that I couldn’t put my finger on. When I got up enough courage to mention it to one of my colleagues she felt the same way. Together we went and talked to the patient about how we were feeling. We said, you know everyone thinks you are ready for discharge, how do you feel about it? The patient admitted he had just had some suicide thoughts and verbalized this to us.

We kept him in our intensive area because there was just something about him that made us feel for sure that he was an absolute suicide risk, that if we left him out, that he would do it again. We did eventually keep him there a lot longer then maybe we would have with some other people because of that feeling. He was eventually discharged about two weeks later than he would have been. We
haven’t seen him since but have heard through the therapists that he is doing fine.
The reason we kept him under such high supervision was because all of us just had a feeling that if we didn’t something would go wrong again.

None of us really knew what it was, but it was just something about the way he was acting, it was one of those things that assessment-wise, you couldn’t quite put your finger on it, you couldn’t quite back up your feelings, but I think we did right by him. I am afraid to think what might have happened if we hadn’t kept him longer.

Tonya shared another powerful example of how her intuition guided her decision making and enhanced her patient safety. Tonya explained:

I work in an area where there is a large population of Hispanic and Mexican migrant workers. In this culture the woman takes care of her family and is the matriarch and the source of strength in her family. However the women defer to the male and become passive, submissive and selfless to the male authority or head of household. I mean the women are so selfless they live without adequate resources to take care of their family and they go without food to be certain everyone else has enough to eat. They are stoic and feel very threatened at home by the male head of the household. When the male is present in the hospital room, the woman is not even permitted to answer any questions. When I am in these kinds of situations, I really rely on my intuition to guide me because it is a culture that is so very different than my own.
Navigating Among the Professional Relationships

Participants all spoke of numerous circumstances where their intuitive decision making was either validated or blocked by their colleagues. Many shared times when they were working with persons who they considered to be in positions of power, either a physician or another nurse, who either agreed or disagreed with them and what lessons they learned as a result of the interaction. When these colleagues where in agreement, the novice nurses viewed this as positive reinforcement and validation of their intuitive decision making. However, when their intuition was met with ridicule, and disagreement the novice nurses recalled this as a disapproving lesson – one in which they “were ignored,” “blocked,” and consequently they would be more “intimidated,” “scared,” and “nervous.” Despite this, most participants continued to rely on their intuition to inform their decision making and found ways to navigate around these perceived sources of power. Although few of the participants used the word “power” this was implied when they were referring to theses relationships.

Dealing with power relations among medical and nursing professionals. Many of the participants relayed stories about the physicians being “extremely intimidating” (Kylee) or felt that the “doctors did not believe them” (Jordan). Others had less confidence when they had to confront a physician with their intuition. Although the participants did not define these feelings as coming from power struggles, this is clearly what was implied when speaking with them. Tina stated that she does not have much opportunity to work with doctors very much because she works night shift. But went on to state that “one thing that prohibits my using intuition, is the fact that she feels
physicians are “not going to trust what I say unless I have something factual to back it up with.” She admits that often times before she calls a doctor she will,

Go and get all these little pieces of evidence that is time consuming, but, you know, I go and get the very latest vital sign and I get the color of this and the statistical data for that before I call. I feel like I have to throw these numbers at him very fast in order to get any action from him.

She also feels that it would be really nice to just call a doctor up and he would say, “ok lets talk about this.”

Karen describes her intimidation when working with midwives in this way. I have left situations where I haven’t followed my intuition and I know the outcome was exactly what my intuition was telling me it would be. I knew something was not right. Every time I haven’t listened to that inner feeling I have kicked myself. Why I didn’t listen to myself, was because the other part of me was saying, you are a new nurse! What are you doing? Your attending, your midwife, the person above you is saying everything is fine. Then I second guess myself and tell myself I am just being too nervous. Other times it is a matter of not having the trust or the confidence in myself to stand up to the midwife who has more experience than I do.

Others such as Linda and Lily describe how they deal with these issues. Linda notes that working with surgical residents is a challenge because, “some listen to me, and value my input, which is “fuel for my intuition,” but others listen, and then do what they want anyway.” As a result of this Linda admits she “gears her report to suite their interests.”
Lily shared that when her gut feeling is that a patient’s condition is deteriorating despite the clinical evidence and objective data to the contrary, she will inform the physician of her feelings. However she shared the following example of not wanting to question the doctor. She said, “informing the doctor is one thing, but questioning the doctor is another.” Lily clarified:

This was the first patient situation where I needed to administer thrombolytics. This was a 44-year-old patient who was found by EMS on the scene to have weak to no peripheral pulses. Her heart rate was in the 40's, and she had some circumoral cyanosis. The prehospital team paced her up to the 80's or 90's, but she was having an inferior myocardial infarction. When caring for her it was a battle to keep her blood pressure up but we gave her enough fluid. I'm having this inner nagging feeling that we are giving her too much fluid. She was starting to cough a little bit more and I listened to her lungs. I thought she sounded wet, whereas she didn’t before. I was just noticing these subtle clues.

I informed the Emergency room doctor who was working with her of my assessment findings. The ER doctor responded, ‘oh well, if we diurese her, we are just gonna lose her blood pressure.’ I was like, okay, I gave him the data, he didn’t want to do anything about it, and I didn’t feel as though I could not question him.

I found out later when the patient was in the heart catheterization laboratory (cath lab) that she needed to have diuretics because her wedge pressure was very high. I thought to myself, why didn’t I push a little harder for my patient?
Helen also had a similar situation to Lily’s and explained a situation where she notified the physician regarding her patient but she was not as assertive as she felt she should have been due to the “unwritten law” that “you know you just don’t question a cardiologist, let alone for an intuitive hunch.” Helen stated:

I had a patient that came in with chest pain and went right to the cath lab and needed a coronary artery stent. I cared for him on for 16 hours, and talked to him for a long time. His grandchildren came in and I walked him out in the hallway so they could see him. He was a really nice guy who joked around with me the whole time I was caring for him. I kept getting this uncomfortable feeling however that something was terribly wrong. I had this uneasy feeling a couple of times that I was taking care of him. His BP was sky-high, like it was 192, 200, 210 and he was supposed to be discharged Saturday. This was Friday, so Saturday morning, it was probably around 4 or 5, I had called the cardiologist and informed him that the patients BP was sky-high and he was to be discharged today. I informed him that I didn’t think it was a really good idea. The cardiologist ordered Vasotec, which I gave. The patient asked me, ‘do you think I will be discharged today?’ I said, ‘I really don’t think that you will with your BP being this high.’ Later Saturday afternoon he was discharged. I didn’t really know if they got his BP under control or not.

Sunday, the next night that I worked, I got report on a new patient that I was to get. It so happened that it was the same patient who had just gone home! He was coding at home. His wife found him slumped over in a chair, did not know CPR and had called 911 and they talked her through it. Immediately, I knew
I should have been more persistent and told the cardiologists no, he should not be discharged today! If I only would have been more persistent!

The working relationship between nurses affects the novice nurses’ willingness to act on their intuition. Helen describes it this way, “old nurses have very little tolerance for new nurses. I hear what they say about the new nurses and what they say about me and they keep on saying these things.” For other novice nurses they equate the older, more experienced nurses to be more intuitive. Consequently, they are not as likely to approach them with their intuitive hunches because they felt that if their intuition was right, the experienced nurse would have thought about it first.

Lily describes a situation where she was helping another “older, more experienced nurse with several procedures with her patient (get blood cultures, get a second intravenous site started, insert a Foley catheter, and check a rectal temperature). During this time, Lily was making observations and getting intuitive hunches about the older nurse’s patient that she didn’t feel she could verbalize because Lily felt, the older nurse should have picked up on the data before she did. Lily recalls,

As we were doing these procedures I kept watching the patient’s eye lids fluttering very fast. My gut was telling me she is having a seizure? Then at one point, I saw her kind of turn her hands into her body and I thought, um, decorticate posturing? but I didn’t say anything because I was working with a nurse who had been there about 30 years! I thought, well, I don’t need to say anything, I have only been here nine months. I had written a note on the patients’ chart describing the eyelid fluttering. When the older nurse read this note she said to me, Lily what did you think about that eyelid-fluttering, do you think
something was going on? I said yes, my gut was telling me she was having a seizure and I documented that. I should’ve said something to her verbally, but I thought, she is gathering the data she needs, she doesn’t need my assessment, you know nine months of experience versus her 30 years or whatever it was. She was like, do you think that was important and I said, well, I documented it so yeah I thought it was important, but I guess I should have verbalized it to her or the physician, but I just didn’t. That was something that told me, hey, next time I see and feel something whether I think somebody else saw it or not or whether I think they should probably know this and they do know this, I will just say, hey, did you see that and is that what I think it is.

Lily also shared another story involving a patient who was in a poor state of health, and as a consequence of diabetes, had bilateral below the knee amputations, and was going blind. She was not alert, was real sleepy and drowsy. Lily stated:

When I would call her name she would wake up but then go right back to sleep. The medic who brought her in mentioned that she had just been placed on OxyContin, but never said to me may be this is too much for her. My initial gut feeling was that we need to give her Narcan. But as a new nurse, I kept second-guessing myself and wondering why isn’t someone else thinking about this. We did all these other studies I kept having this feeling and kept it to myself, let’s just give her some Narcan. I finally got up enough courage and said to the resident, do you want to try Narcan because she was recently started on OxyContin, The resident agreed. I administered the Narcan and afterwards the patient was much more awake and we sent her home an hour later telling her not to take her
OxyContin. I thought to myself. Okay, like that was not that hard but why didn’t somebody else think of that? I thought of that and I just started here two months ago.

Linda explained that she has experienced some animosity from nurses who have a different educational background than she has. Linda notes that once a nurse with a diploma or a nurse with an associate degree finds out she has a bachelor’s degree they treat her very differently and treat her as if she should know everything because “after all she went to a four year program and they only went to a two year program.” Linda states:

I really have a good education, but I don’t think it is any better than anyone else’s who went to a two-year program. I think that if you want to be a good nurse and you apply the effort then it doesn’t matter what your educational background is. I feel that I am still learning. I don’t know that there is a whole lot of difference between educational backgrounds. I never once expressed that I thought I knew it all. I think there are a lot of two-year nurses who have a problem with bachelor degree nurses and they don’t want to help you because they feel you should know it all. I believe that experience is best the teacher and it does not matter how many years of school you have. It is the experience at the bedside that really helps you with that experience and knowledge. I did not put BSN on my nametag for a reason. It is not because I am not proud of it, it’s because I don’t want anybody to not want to help me. So to go to them with an intuitive hunch is out of the question for me, unless I feel comfortable with them and have developed a good working relationship with them.
Tonya explains that she finds it intimidating to go with her intuition when others, with more experience are outwardly disagreeing. She happily told me of situations where she was right such as the next example but even so she admits she has to “dig deep inside herself to find the courage to really do what she believes is right.”

Tonya described a clinical situation where she felt that something was “terribly wrong.” She felt that one of her clients was involved in domestic abuse. She expressed her feelings to her more experienced colleagues who all said, “oh no, no, we know her husband, he is wonderful!” Tonya felt a bit perplexed but continued to feel as though something was not right, however did not go any further with this feeling because her colleagues knew the patient and her family. Well Tonya sadly recalled that, “the patient came in the following week or so and was beaten very badly by her husband. I have since learned how to navigate through these power relationships in order to keep my patients best interest in mind.”

*Getting a multidisciplinary team involved.* Despite the identified power issues, many times the outcomes of intuition hunches would trigger these novice nurses to want to seek help or advice from other members of the health care team to implement a holistic, multidisciplinary approach to care. These other team members might be doctors, nurses, family members, social workers, midwives or the patients themselves. Several participants voiced that their intuition played a part in getting other disciplines, such as social service, involved in their patients’ care to provide holistic care. They described it as, sometimes you get this “general nagging sense about a situation that you just know the patient or their family is going to need help” to deal with the situation above and beyond what a nurse can do. It might be a home situation that perhaps is not quite right or
you realize the support is not there or you fear for a child’s welfare. Whatever reason, your intuition is telling you, “it just doesn’t seem right” and you don’t want to just let it slide by because you never know if you will hear something on the news later that you should have done when they were in the hospital the first place. 

Emma feels that her sense of intuition is broadening; however, as a new nurse, she feels quite “unsure of herself and seeks out more experienced team members before she would go and do something drastic.” She stated that she would “definitely ask other people’s opinion such as the charge nurse, nurse manager, and if there is a doctor around that I feel comfortable asking, I would ask him.” Many of the participants agreed with Emma, stating that if something doesn’t feel right, they would do something about it. For some, such as Ethan, Adam, Diane, Karen, and Allison, they would run their intuitive hunches by someone with more experience and at the same time would “formulate a plan in their head, so that when discussing their intuitive hunch with the more experienced nurse, they would also discuss their thoughts regarding a plan of attack with them as well.”

Karen shared the following example of how her intuitiveness lead her to get other team members involved in the care of her patient. She had been working for about three months when this situation occurred. Karen stated:

My patient was in labor and was leaking amniotic fluid. It was questionable whether there was meconium in the fluid or not. I just had this twisted bad feeling inside, it was very, very light, but I had this gut instinct that we should call the neonatal intensive care unit (NICU) just because of not being sure if it was meconium or not. I knew NICU nurses don’t always have to be there, but I just
had this feeling that they needed to be here this time. I wasn’t sure why and to make it worse the NICU nurse did not want to come down because I didn’t have any facts to back me up. I figured the NICU nurse wasn’t going to come I was just going to notify the physician because I had this feeling that something was going to happen and they need to be here. By the time the head came out the NICU nurse and the obstetrician were there and that was a good thing because when the head came out following that, there was this, gush of this thick, thick, thick green meconium. I was so relieved that I had called the physician even though there was no sign of that before, I just had this feeling that something wasn’t quite right and that I needed to have someone else there. I was so glad they were there because they were able to take care of the baby in a much better fashion then I could have. That situation just struck me as well, you know what, that gut instinct, I need to follow it even though it doesn’t make sense sometimes, because, I don’t know, it is like a first instinct thing, you just have to go with it because it seems more likely than not, you will regret it if you don’t follow that.

Karen shared another example that occurred just a week or so before our interview where she was prompted to get another nurse involved in the care of her patient. She stated:

This patient that had just delivered a baby and I wasn’t real comfortable with the amount of bleeding she was having after the delivery. I was not sure if it was more than I was used to or more than was usual. I couldn’t tell because I haven’t had a lot of experience but I knew it was more than I had seen before, but not enough to think that it was real abnormal. However, I was feeling uncertain and
something was nagging at me. As a result, I had another nurse come in and check her. I said, ‘I am not really sure what is going on, but I just don’t feel right, I don’t know why.’ I didn’t want to ignore my gut and let it go, just in case. The other nurse felt the same way after she assessed her.

To make a long story short the patient ended up having to go back for a Dilation & Evacuation (D & E) because she had some retained placental pieces. Had I not paid attention to my uncertainty and the nagging feeling inside me, it would have probably continued and I don’t know what would have happened. It was just one of those gut feelings that I had. The only other symptoms were that she seemed more exhausted then most moms, but that was pretty much the only thing, besides that, everything was fine. Her vitals were fine. You know, (um) just the bleeding wasn’t what I was comfortable with.

Creatively Dealing with Limitations of Resources

Novice nurses identified several issues related to the limitations of resources. Participants identified resources as hospital resources as well as human resources. Limited hospital resources were noted to be the decreased patient length of stay, shift that the novice nurse worked and length of the shift such as twelve-hour shifts. Human resource limitations were noted to be: decreased amount of nurses which lead to increased nurse to patient ratios, not wanting to call a doctor in the middle of the night, and decreased ancillary support which caused the nurses to have to do more of the paper work as well as other non-nursing duties themselves.

Participants began discussing the limited hospital resources by commenting on the decreased patient length of stay, the various shifts that the novice nurse worked and
length of the shift such as twelve-hour shifts. Many of the novice nurses were frustrated with the decreased length of the stay that their patients have, secondary to mandates from diagnostic regulatory groups and insurance companies. The main frustration seemed to be that it decreased the amount of time the nurse had to spend with the patient, and as a result, the ability to form a therapeutic nurse-patient relationship was decreased. According to Olivia, “this not only imposed time constraints but also decreased her ability to identify patterns or trends in the patient’s condition and as well as decreased the time necessary to gain her patient’s trust.”

The shifts that the novice nurses worked also had an impact on their self-perceived intuitiveness. When working night shift, they felt they had to rely more on their own inner wisdom since the number of doctors, nurses, managers, and other members of the health care team are not as available as they are on day shift to provide advice. Emma concurred with this, stating that “on nights I really rely on my own intuitive knowledge prior to notifying a physician and possibly awakening them in the middle of the night. I don’t have the luxury of running my intuitions past an expert like I do on day shift.”

Ethan agrees with Emma but adds that he appreciates the uninterrupted time with his patients on nights. He notes:

During the day, you’ve got 20 different doctors running around the units that you can access quickly. At night you got to pull your inner wisdom together. You know, is this something that I really need to call the doctor for at 2 in the morning to talk to them about or is this something that I can wait and do labs and then call the labs to the doctor and report this along with the labs. Patients are on a very thin line teeter tottering back and forth between life and death and you know as a
new nurse, the thing I miss about the day shift is the accessibility to the doctors and other expert nurses. Mainly because when they round, if they started talking about something and I didn’t know, I had no problem stopping them and saying, well, what is that? Explain that to me. I have learned so much by rounding with the physicians.

Tina also appreciates the slower and quieter night shift routine, which she feels, affords her the increased opportunity to spend more quality time with her patients to get to know them better and gain intuitive insights. Ethan added that on nights, “you can dig in the chart, you can audit the chart and see what is going on and get an idea, try to get a picture, build some type of picture about what is going on with this patient to feed your intuitiveness.”

Not only did the shift affect the nurses’ intuitiveness, but so did the length of the shift. Tonya stated that her intuitiveness is enhanced and at its sharpest when she is “fully present” with her patients. She emphatically stated that “being fully present is dependent on her physical, mental and spiritual well being.” When she feels tired, hungry and sleepy she does not feel as intuitive. Other participants such as Adam, Karen, and Lily, to mention a few, agreed with Tonya, stating they need to be prepared for their shifts both mentally and physically by having enough rest and nourishment.

Helen admits that she attempts to limit the double shifts she works because she feels the more tired she becomes the less intuitive she is able to be. She admits, “when I am tired I second guess myself more, but I would still call a physician regarding a patient if I thought a physician should be notified about something.”
Several participants noted “hospital politics” deter from their intuitiveness. Helen noted that when she hears nurses complaining about other nurses, hospital administration or shifts they have been assigned, this interferes with her intuitiveness as she does not feel safe and trusting and is distracted. Tonya adds that when she hears colleagues complaining, as she put it, “having bitch sessions,” this annoys her and she consequently feels less able to pick up on intuitive vibes from her patients as she is drained from focusing on these other issues.

Ethan added that he too feels hospital politics is very discouraging. His hospital was thinking about starting a union to represent the nurses. Ethan described it this way:

There were a lot of things going on in the hospital where I work. When you get everyone’s morale down and the pettiness that goes on, I think it can get in the way of your intuitiveness. It has gotten me down in the last couple of months, you know, where I question whether or not I made the right decision going into nursing to begin with.

I try to keep all of that separate from my patient care because I think you have to stay focused on what your job is, why you are there. You have to leave that kind of stuff to the side because if you get too obsessed with that kind of stuff, then you miss the subtle changes with your patient and those are the most important things. I am very much obsessed with my patients. I want to do right by them. I still hold onto some of my ideologies that I developed in nursing school about being an advocate for my patients. So I think hospital politics can really get you down, it can totally affect your intuition and affects your job overall. If you rely on intuition very much and I have never had a job like this that
deals with so much politics and these kinds of worries. You’ve got somebody’s life in your hand, you could mess up, one time, and that is it! It is going to take someone’s life from him or her. So, that’s why I just, you know, I try to stay very focused and not let those kind of things bog me down and worry me too much. You’ve got to keep your eye on why you are here and when they are groveling and carrying on they are spending way too much energy thinking about this stuff, and not enough energy thinking about their patient.

Human resource limitations were decreased amount of nurses, which lead to increased nurse to patient ratios, not wanting to call a doctor in the middle of the night, and decreased ancillary support which caused the nurses to have to do more of the paper work and other non nursing duties themselves and lastly the hospital environment.

Increased nurse-patient ratios and increased paper work have been factors that, for these novice nurses, seems to decrease their ability to be intuitive. Tina notes that “paperwork is always a complaint of nurses, but the way it affects intuitiveness is it takes you out of the patient’s room and therefore decreases your exposure to them and then you are not as likely to pick up on intuitive hunches.” Tina describes her favorite part of the day as “going into each of my patient’s rooms and getting to meet these people because for the most part they are very nice and open to nurses. I enjoy my role as a nurse and helping patients regain their state of health.”

Tina informed me that her floor has been functioning without a nurse’s aid and a unit secretary for since February. She stated:

The nurses have been doing the patient care assistant tasks and secretarial work for a long time, which is good, and bad. Good because it forces you to be in the
patient’s room. But bad because the secretarial work takes you out of the patient’s room and detracts from patient care and consequently your ability to pick up on intuitive hunches.

Kaitlyn admits that the hospital environment is very much a structured environment, based on rationalism and the medical model where the messages of “Don’t deviate from the norm” and “it has always been done this way, so we are going to keep doing it this way” are very prevalent and very much engrained in the health care providers. She feels stifled by this attitude and feels that it limits her desire to take a risk and act on her intuitiveness.

Looking back on these limitations of resources, the participants implemented creative ways to transcend the limitations, implement intuitive knowing in their practice and provide safe quality patient care. For some participants they chose to work a shift that suits their body clock the best. Ethan stated it “feels totally unnatural to work days, and therefore, I chose to work night shift.” Others, such as Linda and Kylee make sure they have proper rest and nourishment prior to starting their shift.

Kaitlyn admits that she feels “advantaged at being the kid on the block” because she looks at everything with a “new set of eyes.” She feels experience can “kind of jade you in some ways” because then you “don’t look at the patient holistically anymore rather you are looking for numbers to deviate or change from what is expected.” Kaitlyn admits she wants to keep this new nurse attitude that she has today so she is more cautious and does not take patient situations for granted.

Numerous participants had to continually remind themselves to stay focused on why they went into nursing and that was to provide quality patient care. They remained
focused on this reason and were then able to build up the courage to maintain open lines of communication between physicians and nurses who were easily thought of as being intimidating. Some admitted that as a new nurse this was particularly challenging.

The Culture of Nursing Education and the Nursing Profession

The novice nurses stories about intuition in nursing education and nursing practice revealed four major areas of significance: 1) the continuing reification of the medical model, 2) getting mixed messages, 3) dealing with and unlearning fear, and 4) finding a holistic balance among intuition, science, and holistic ways of knowing. This section will present the major themes that emerged relative to these areas. These themes continued to reveal how novice nurses believe intuition is a significant part of their practice and is shaped by their experience in nursing education. The nurses’ stories revealed their accommodation and resistance to the forces of the medical model and the challenge they faced in attempting to find a holistic balance between intuition and rational ways of knowing.

The Continuing Reification of the Medical Model

Many of the participants shared stories about how the medical model was very prevalent in nursing school. Positivism and needing scientific rationale for nursing thoughts and interventions was strongly enforced by some faculty members. Diane recalled one time very early in nursing school, she said something to a professor regarding her patient assessment and the professor replied, “how do you know that?” Diane could not articulate how she knew. She said, “I don’t know but I was just talking to my patient
and it became very clear to me.” The professor informed her that “you have to be able to prove it.” Diane states:

I don’t know. The instructor said, well you have to be able to prove it and, I couldn’t. I mean it was one of those things that I couldn’t quite put my finger on, there was no quantitative evidence to back it up. It was just one of those things where I just somehow, from somewhere else in my life or whatever, I just felt like that was probably where this situation was headed. I don’t even remember what the situation was, but I remember knowing without being able to back it up and because I couldn’t back it up my instructor didn’t want to hear anymore about it.

Tonya and Karen shared other similar stories. Tonya believes it is so hard with the “medical model being so predominant in nursing education and especially in the hospitals.” She went on to say that, “because intuition is not a valued way of knowing, it is not objective and you can’t measure it and because it is so different to each and every person,” that she never felt as though she would be permitted to rely on intuition. Karen stated that although she believes intuition “makes you a better clinician, because it is not just looking at the facts, because the facts don’t always make sense,” she is still reluctant to use intuition in practice. She explained that in nursing school, they were informed that valuable intuition was based on experience. She notes:

As students, we had no experience. We had none, but I think some of us, not necessarily myself, but I was in a class that had a lot of older students, a lot of them did have significant life experiences, so that did aid them in their intuitiveness in some ways I think.
Many participants including Allison, Adam, Emma, Kaitlyn, Lily and others could not recall discussing intuition in nursing school. Allison stated she doesn’t remember intuition being talked about very much at all. “I don’t think it was ever even mentioned I mean, I’ve heard that nurses are just intuitive people in general.” Emma adds “intuition was not discussed in my educational program,” and because it was “not taught, I felt that it is not acceptable to use intuition in my professional practice.”

For some participants they recalled being taught the “importance of developing a positive therapeutic relationship with your patients” but added that the emphasis was on “gathering factual information based on your communication and assessment.” Lily recalls “nothing was ever mentioned as far as what to do about intuitive information.”

Tina recalled at the very beginning of nursing school, talking a lot about communication with patients, but not really emphasizing intuition. From there, she felt her education was definitely “more scientifically based, trying to get us to reach a certain knowledge level to be able to pull everything all together.” She believes intuition in some ways “was expected, but not taught because they were expected to follow the books. She also questioned if it was possible to teach intuition.

Helen recalled that in nursing school, she was too preoccupied to get done what she needed to get done, and do what she was told to do, intuition did not play a part in her activities. She informed me that,

In nursing school, I did what I was told, and I did what I needed to do and that’s about it. I established what I thought was a therapeutic relationship with my patients but in the back of my mind, I was always asking myself, do I understand what is exactly going on, is this what my nursing textbook says? and oh my gosh,
my professor is going to ask me this medical question and do I have the right answer? The nervousness, anxiety, anticipation, fear and everything else, totally overrode any intuition that I could have possibly felt.

Linda felt similarly. She explained it like this:

All the care plans, the paper work and that kind of thing, the take home quizzes that were worth 5 points and you wrote two pages, all those other thing… I was so preoccupied with facts and hard knowledge and all that stuff that I didn’t necessarily think that I could take the time to listen to my intuition. I think as far as the patients are concerned as a nursing student, I don’t think that intuition enters into it [practice] very much at all. I think when I was on the floor, if I had a very strong intuition, that was nagging at me I would do something about it. But then again I wouldn’t want to do anything that would jeopardize my patient care or my graduation. If I was not sure what was going on, I would go and find somebody else and not my professor because I would not want to fail clinical based on my lack of medical knowledge and basing my practice on intuition especially if it was wrong. But, I think I was so wrapped up with the amount of work and the amount of things that I needed to get done that it [intuition] did not necessarily play a big role.

Linda further explained she used her intuition often in trying to establish therapeutic relationships and “read her professors, her patients and her peers” but in ways that she would not articulate openly. She stressed that in this area her intuition played a “very big part.” She could tell if her patient liked her or if her professor thought she was doing a good job.
Getting Mixed Messages

The participants shared stories regarding how when they were students they often seemed to get mixed messages to trust intuition to some degree, whereas at other times, and more commonly, they were encouraged to base their practice strictly on rationality and scientific knowledge. These mixed messages were present not only in the clinical teaching area but also in the classroom. Linda explained that her professors displayed the use of intuition in regards to what “they thought about a student and if they felt a certain student is going to make a good nurse.” Her belief is based on the fact that they would often say “you can just tell which students are going to make good nurses” or “is something going on in your life that is preventing you from putting forth your best effort?” or, you know, they would say “something is not right with you lately, you are not like this normally, what is going on.” Based on these professor comments, Linda felt that in nursing school intuition was more of an active entity in the professor/student relationship rather than the student being encouraged to use intuition in practice. Ethan recalls his critical care professor, using intuition, to inform him as to what kind of nurse she felt he was going to be. She said, “Ethan, I don’t know if you realize this yet, but I’ve got this feeling you are going to be a critical care nurse.”

Diane recalls being told to “choose the first answer on the exam that comes to mind, and do not second guess yourself.” She went on to say that while this type of thinking was “encouraged in the classroom she felt that it was discouraged or even prohibited in the clinical setting.” Karen remembers being taught the same thing that Diane described as far as test taking strategies. Karen also stated that it would have been
reassuring for her to hear stories from professors encouraging us to listen to and use our intuition. She described it this way:

For me, I would have liked to hear about situations they [professors] experienced and how intuition guided their practice. They have so much more experience, which makes them a more well rounded person. It would have made them a better teacher overall, I think because it is not like they are just doing stuff from a textbook, they have actually been there and they know what they are talking about, it is not just memorized stuff, it is stuff that they have experienced, their stories would have connected things more for me and made intuition more real.

Kaitlyn recalls a situation early in her clinical experience where her nursing professor merely discounted her intuitive hunch as a premonition. Kaitlyn was very disappointed in her professor’s response and consequently her intuition went underground and was not openly used or talked about again. Kaitlyn was not only disappointed but she was confused because this was the same professor who taught her to, “never read the monitor, always read the patient.” Other professors she had would encourage her to “look at the clinical picture, not the symptom, or look at the whole picture.” Kaitlyn told the following story:

I had two patients in two rooms that both needed chest x-rays. The x-ray technician came and took a portable x-ray. He then went and took another x-ray of the other patient as he went to the next room, I was thinking to myself, how do they label those x-rays? It was just like something hit me in my stomach and I don’t know, it was just a strange feeling. I kept wondering how do they label those? I wondered how they don’t miss label those x-rays?
As it turned out, two hours later, the doctor came up and said the patient in Bed 2 is in acute pulmonary edema! I was puzzled because the results did not match the clinical picture. Again, this feeling was hitting me in my stomach. The patient in bed 2 was fine, but the patient in bed 9 was very short of breath. As it turned out, the x-ray technician did mislabel the x-rays! They finally figured it out after a couple of hours that the x-rays were mislabeled. It was just weird, as he was wheeling it down the hall, I just had that gut feeling. I guess from working in the lab, drawing on that experience, because in the lab, a lot of people would mislabel blood work.

After this all was figured out I told my clinical professor that ‘I just knew that was going to happen, I had this gut feeling… something didn’t feel right.’ She replied, ‘oh, you just had a premonition that’s all.’ I remember feeling crushed but I didn’t argue with her because I thought she would think I was just a little loopy.

Dealing with and Unlearning Fear Associated with Nonrational Ways of Knowing

One of the commonalties these novice nurses discussed was a deep sense of fear associated with using a nonrational way of knowing such as intuition. This fear started during nursing school and continued upon graduation. The participants’ stories depicted fear related to several things: fear of failure, fear of harming someone, fear related to the possibility of losing their credibility with their new coworkers or patients and / or fear of forgetting to do something. It became apparent that the fear was the result of pressure from their professors during classroom and patient care situations where they were encouraged to base their care on rationality and the scientific, medical model. These
feelings of fear made many of these novice nurses question whether they could even ‘survive as a nursing student’ (Adam) and, if they did survive, they wondered what kind of nurse they were ever going to be (Tina).

Tina recalled that her nursing supervisors once she started working, were trying to get her and the other new nurses to “be less fearful and paranoid.” She stated that:

We have several new nurses working together on our cardiac-nursing unit. Our nursing supervisors have worked very hard to change our perspectives away from rationality and feeling like we always have to have proof and always needing to back up our assessment with facts and figures. Although I would not say intuition is valued and encouraged in practice, it is promoted more than it was in nursing school. We have gradually been leading up to having an increased patient load. The supervisors feel it is going to be important for us to make good decisions, use our time wisely and not get really paranoid about things. We can’t forget our other patients by spending lots of time looking something up on the computer and trying to figure out what is going on with our patients. The supervisors tell us, we have to learn to be good nurses all around and use all of our knowledge bases, even in situations where we don’t know what is exactly going on. You might not get definitive proof about something you are looking for, but you can get good enough proof to make a phone call to get a support system around us. When I came out of nursing school, I was just a very fearful nurse.

When Tina was asked where she thinks this fear comes from, she replied, “I think it comes from the constant evaluation process during nursing school, where we weren’t really allowed to experience a clinical rotation where we are taking care of patients
without getting a written summary of our behavior and our actions and our thinking
processes at the end.” Tina elaborated that, “I think if we could create an atmosphere
where there is more building of the clinical skills and less emphasis on the whole
evaluation process, where you feel like you are getting a report card each and every time
you move in clinical, this might help to decrease the fear factor.”

Allison remembers enjoying the nursing externship she participated in during the
summer of her junior year because it was “non-pressured” unlike nursing school. She
states she felt like she was a real nurse and denied feeling fearful and anxious which is
something she admitted to feeling routinely in nursing school. Allison said she:

Felt like I could ask questions freely or let my registered nurse know my thoughts
and intuitive hunches without the fear of getting penalized or graded badly on
what I was doing.

Olivia recalled that many of her undergraduate professors were so busy
themselves or she herself was so busy as a student, that they just “focused on lab values
or listening to lung sounds, or administering a medication, or developing a nursing care
plan.” Olivia was fearful that she would “forget something vital.” Olivia admits that,
“nursing students are so inundated with stimuli from all directions that it is scary not
really knowing exactly what is going on or what to focus on.” She felt that this was
compounded because her professors did not encourage students to slow down and
consider one thing at a time. Olivia felt that her professors were pulled in many directions
and oftentimes they just wanted to get done themselves.

Jordan shared that his fear comes from authoritarian people. When he is around
those kinds of people he is afraid to verbalize what he is thinking or feeling. He is afraid
to “be unsuccessful.” He added as a student, “I wanted so much to be the impressive student that goes out there, knowing exactly what I am doing. I had to constantly tell myself in nursing that no student is perfect.”

Another situation that causes Jordan fear is when he works with a certain physician. Jordan expanded on this a bit more to reveal:

No matter what I seem to tell this physician, he just doesn’t agree or he doesn’t want to follow-up on my suggestions. Even though I intuitively know what’s going with my patient and other nurses are backing me up. I have had similar experiences with some older nurses as well, I mean, I have wonderful nurses that I work with, but some, I mean, will tell you, you just don’t know. They will say don’t worry about that kind of stuff, that’s not really a symptom or something like that. So, I think, I am fearful when no one is listening to me or belittling my intuitions.

Kaitlyn recalls that she would rely on her preceptors’ intuitions or assessment rather than on her own because she was afraid of being wrong or harming someone. This fear she felt inhibited her use of intuition. In nursing school, Kaitlyn was forced to “look at things in the box” whereas she feels that if her feelings and intuitive hunches regarding patient care situations could have been discussed more openly and freely with her professors this would have reduced her fear. As a student, she felt the emphasis was on “filling my head with knowledge and there was no discussion about it.” When I work with students now as their preceptors, I approach it differently to prevent this “paralyzing fear.” I frequently ask them “how they feel? What do they think is going on? or what interventions do they think will help the patient holistically?” Oftentimes, the nursing
students and new nurses that I work with are very much appreciative of my interaction and discussion with them. They see it as a way to bounce ideas off of one another and to collaborate on the care of their patients.

Karen recalls being fearful of using intuition even though she believes it is “a huge part of nursing and an immense part in what I do each and every day with my patients. I think intuition is used all the time. It is always present.” She believes this fear to rely on intuition, is because “intuition was highly under-represented in nursing school.”

Finding a Balance among Intuition, Science and Other Ways of Knowing

The need to find a balance between multiple ways of knowing in order to promote holistic nursing practice was clearly evidenced in the vivid stories of many of the participants. Their narratives discussed the need to: 1) hear stories from preceptors and mentors regarding their use of intuition to evidence how intuition and other ways of knowing act collaboratively to enhance holistic practice of the novice nurse, and 2) slowly change the profession.

Wanting and appreciating stories. Novice nurses wanted to hear stories from their educators, preceptors and mentors regarding their own use of intuition in their practice. The novice nurses stated this would help to validate the usefulness of intuition and further evidence its acceptance and value in practice. These stories may also show how intuition and other ways of knowing work collaboratively to enhance holistic practice and improve patent outcomes.

Tina suggested, as a way for continuing professional education programs to enhance intuition in the new nurse, that the staff development faculty “share their stories
because she feels that stories are very undervalued.” She also suggested discussion
groups as a way for nurses to share stories. She explained:

I think that would be a very valid training technique that doesn’t sound like it is
coming right from the book. Intuition can be shared in discussion groups. We
have preceptors who have worked up there for years! Over and over again, I say,
tell me a story about this drug, you know when you gave Brevibloc before, what
happened to your patient? This builds up some of the lore that goes on with
nursing, not just, open up a book and read the facts. But rather, what did you do
for this guy, what did it do for that guy and why don’t you like to give this drug
or, why are orthopedic patients dreaded so much. It’s like you have 20 years of
knowledge, please share your life!

Linda recalls during her nursing program discussing “just simply how do you
know?” She learned from one professor’s story that “you need to allow yourself time to
observe and listen. You need to allow yourself time to acknowledge those things that are
not really obvious.” Linda feels that this professor was just phenomenal. She “gave me
confidence, that if I felt something was wrong, that it was ok to let that feeling be heard.
It needed to be addressed, even if it was wrong!” She had the attitude, “who cares if it is
wrong, it still needs to be addressed. This professor opened up to the class by telling us a
stories about how intuition worked for her and also when intuition didn’t work for her
with her own personal experiences. She told us [nursing students] how good she was in
picking up on intuitive hunches with her patients, but ignored her intuition when caring
for her own sister.” As described by Linda her professor shared the following story:
My professor’s sister had metastatic breast cancer. She called her one-day and said she wasn’t feeling good at all and was having trouble breathing. My professor admitted that she did not pick up on her sisters’ struggling voice and shortness of breath over the phone. She told her sister if she wasn’t feeling better in the morning she would take her to the doctor. As she hung up the phone, she felt a nagging feeling to go and check on her. But didn’t. The next day she wasn’t feeling better, so my professor took her to the doctor. Her sister was diagnosed with a cracked rib and punctured lung as the result of coughing so hard.

My professor felt horrible for not detecting in her sister’s voice the fact that something was really wrong and felt even worse for not listening to her intuition. I could tell she was still beating herself up for not thinking that this could have happened. Linda notes that “she learned so much from this one story that this professor told, that I wondered why she was the only professor who shared personal life stories that are so meaningful.”

Ethan recalls in nursing school the faculty and the students were all on first name basis with each other. He added:

Even the Dean of the nursing school, so it was a very intimate relationship. We had one faculty member that was really, into the New Age stuff and was very in tune with multiple ways of knowing such as intuition. She encouraged us to touch our patients, pray with our patients and just sit and listen. She also would share stories with us and encourage us to go with your gut feeling. She also reinforced the fact that when I start out in practice, I will have a solid knowledge base, but there is no way that you can retain every bit of that. So she encouraged all of us to
use our intuition. She said when things don’t feel right, go with your gut! She said, trust, trust, and always trust your gut instinct. She said that all the time. Trust your gut instinct.

Although it wasn’t a part of the curriculum or anything like that. We had such a close relationship with the faculty that we all felt as though we could talk to them [faculty] about anything. They had open door policy, you know, we could walk in and sit down and spend the next two hours just discussing our feelings about what was going on with our patients. I think in some ways they kind of, they did encourage it.

Ethan noted that “Certainly I do rely more on my intuition now, because as a new nurse, I don’t have many nursing experiences to rely on. But I think there will come a point in my career where all different ways of knowing will marry nicely and balance out perfectly.”

Tonya feels her patient assessment and therapeutic communication enhance her intuitiveness. She feels multiple ways of knowing compliment each other and feed off of one another in a way that promotes a holistic balance. She states that,

If this was fostered in nursing school, I would be less fearful and intimidated to use my intuition. I can sit back and see what they [patient] don’t always want me to see, you know, just really looking and actively listening, the way you word things and the body language is really important, regardless of whether you are a medical surgical nurse, or a nurse researcher. To get the full view of where that other person is requires open honest communication with yourself, but more so with the client. When all of this comes together, ways of knowing can enhance
one another. I can very much remember my nursing professor telling us [students] to ‘see everything, hear what is not being said’.

Karen noted that:

Obviously if you don’t see hard facts about something, it doesn’t mean it is not going on, there is more than just the obvious that goes on in any clinical situation. I think that in nursing school the facts are stressed a lot more, and not that you don’t need to know them, but they [facts] do not always provide the whole picture. I know this is why I started doubting it [intuition], because I didn’t know how to prove it. Does that make it not valid? Because usually I believe my intuitions with all my heart, but I mean it is something that you feel pretty strongly about that it is going this way. I can’t prove it necessarily and I think when the idea of needing proof starting coming in there, that’s when I was, okay, throw that whole idea out the window and never go off with what you truly think is going on. I am learning though that this is not necessarily the case either… it is kind of, like I understand where this instructor were coming from, but I thought it was unfair to just all of a sudden like say, no, I am not sure that is correct because you have nothing to back it up with. Sometimes, I don’t know that I always have to have something to back up my thoughts. I mean if you act on your intuition and there is no way that your actions are going to harm the patient, I don’t necessarily think that is a bad thing.

Kaitlyn does not recall being taught intuition in her undergraduate nursing education classes but does have discussions about intuition and multiple ways of knowing in her graduate classes. She informed me that,
A few other nurses were talking on line about intuition and how it guides their practice. The professors’ response was both positive and negative. She stated it was good that you let intuition guide your practice but then cautioned them that intuition comes from experiences and said something about it being from the paranormal. The professor felt that a balance between intuition and experiential knowing was the best approach to patient care.

Adam shared a story that he learned from a professor during nursing school when he was in class learning how to formulate nursing diagnoses and deciding which diagnosis is most appropriate for the patient. For Adam, this reinforces the need to find a holistic balance between the nursing linear diagnosis, derived mostly from the medical model, and taking in your intuitive hunches to provide a basis for your diagnosis. His professor shared this example about her practice.

When caring for a patient one night, she did not like the way he looked. This was her first night caring for him and wasn’t sure if it was a change or it this is the way the patient normally looked. She went in and assessed the patient. The patient told her, ‘I just don’t feel right, but I am fine. I just feel a little funny.’ She went out and had three other nurses’ go in assess the patient. They all said he was fine and this is the way he had been. Still not feeling right about this patient, despite the fact that his assessment was fine, she decided to call the attending physician. She explained to him that there is nothing wrong that she can find but she just has a gut feeling that something is not right. The patient says he is fine but just feels funny. Not knowing where to start, the physician ordered a set of electrolytes. Well the patients’ potassium was 2.6! He would have surely coded if she hadn’t
called the physician and listened to her own inner voice. This informed her ability to formulate the nursing diagnosis and care plan later that evening.

Emma recalls that intuition was not a major concept in nursing school, but felt as though her professors were encouraging it although they did not call it intuition. They would share stories regarding, “there are just certain patients that you know there is something wrong with and you just need to keep your eyes open for that, keep your eyes and ears open and just always be taking in whatever might be affecting the patient.” They emphasized it could be something as minor as too much noise in the hallways, or smells on the food tray that are making them nauseous. Just always keeping your eyes and ears wide open, so you don’t miss anything was the main theme being taught. The professors worked this in during assessment classes. They definitely encouraged you to really hone your assessment skills. Some professors called it intuition, but many did not call it anything.

Although Karen does not remember much about intuition in her nursing education, she does remember the stories based on experiences of her nursing instructors. Experiences that they shared, which were always interesting. As a student she recalls:

I remember it was always amazing that someone can see the entire situation and do something about it, before the situation fully develops. So I can remember the stories and I was like WOW that is really neat, hopefully, I will be able to do that some day. I can’t remember particulars, but I do remember that kind of a feeling, hearing stories about situations that they [instructors] have been involved with or clinical experience they have had. I really appreciated hearing these stories and learning this way it became more real to me.
Slowly changing the profession. Many of the novice nurses have already had the opportunity to be preceptors and teach even newer nurses. They relayed stories about how they attempt to break the cycle of fear so that it does not carry over into practice any longer and inhibit holistic patient care. Tina states:

I precept and teach students often now and they will ask me anything. I love it because I know they are thinking and starting to feel that something is going on with the patient. I think that’s great. I also like when they ask me questions because then I know they are not afraid of me like I was afraid of my nurse preceptors and nursing professors. This open kind of two way relationship should be fostered more in nursing school and if it was, consequently, students and new nurses would be less afraid to speak ask questions and act on their intuitions and feelings.

Olivia believes that nursing school should teach students to “follow how you feel.” She suggests that in certain situations, intuition plays a bigger part than others. For example she says:

When noticing a hematoma or noticing signs that someone is bleeding heavily, you just know that. But intuition also plays a little part in smaller aspects of care like walking into a patient’s room and just noticing a slight difference in their attitude and pursuing it and coming to find out, they said somebody didn’t answer their call light within a certain amount of time. I mean, it is just the little things too that intuition can help with.

Novice nurses’ stories evidenced the desire to foster healthy, trusting relationships between all members of the health care team so that intuitive knowing can flourish. This
was important to them because they “would then feel safe and more willing to go out on a
limb and share their intuitive hunches, ask questions, or seek clarification on patient care
issues.” Allison shared that it is about changing the profession because she feels it is
important for her to be able to talk to preceptors and colleagues on the floor as a way to
build working relationships with them. She states:

By talking to my colleagues, you learn what experiences they have had and what
situations they have been in that make them a more well rounded nurse. For me it
gives them more credibility, they are a better teacher overall because I know they
are not just doing stuff from a textbook, rather they have actually been there and
they know what they are talking about. It is not just memorized stuff, it is stuff
that they have experienced and it is more real to them, I think.

Helen stated she continues to seek validation from members of her health care
team, but will only do this if she feels as though she can trust that they are going to be
helpful. Helen emphasized that she asks a lot of questions especially with illnesses that
are totally foreign to her. She states:

I am constantly asking questions up on the floor because I get a hunch, but I don’t
know if I should trust it or not. I do trust it after I have been validated in that
hunch a number of times by previous experience or by other nurses. But, I
continue to seek validation as long as I trust my coworkers and know that they are
not going to laugh at me or talk about me behind my back.

Diane believes that she is not experienced enough to be confident in her own
intuitive abilities. This is true for several reasons, one, because she is new and second,
because it is drilled into her by her preceptor that she is the new person on the block.
Diane states that often she will run her gut feelings past someone who does have more experience and see if it is valid. She states:

Sometimes they will know enough about the patient or about the disorder to say, we need to look into this a little bit more. That’s when I learn to trust what is going on here or there. I don’t think I have ever gotten a flat no you are absolutely wrong. I mean, but if I do feel an intuitive hunch, I rarely act on it without confirming it with somebody above me. I am still in the stage where I ask a heck of a lot of questions. It is a learning experience. I don’t know that I necessarily doubt myself, but I want to make sure also to be open with my staff so that they know what I am doing. I do recognize that I am new and inexperienced and I want to make sure that I am doing things correctly.

Diane recalled that at her six-month evaluation, the fact that she asks so many questions was noted to be one of her strengths, where she thought it was going to be counted against her. Diane felt as though she was getting under everyone’s skin. But her colleagues reported they liked that Diane had the “guts to ask questions about things” she was unsure of including her gut feelings. Diane had apologized a couple of times, for asking so many questions. But her staff encouraged her to ask questions because they believed this was her effort to do a good job.

Lily recalls feelings reassured and “like one of the group” when her colleagues had a little chat with her and said “don’t worry you are going to be fine.” They shared stories with her about their beginning years as a new nurse. They said, “I can remember sitting on the edge of my seat the entire shift thinking, “oh please don’t code on me tonight.” And they said, “don’t worry you will eventually get to a point where you will
get over that feeling.” Lily revealed that this little conversation was so important to her because she learned that her team members cared about her feelings and about her as a person. She stated, “that was important for me to hear from them, because I knew they cared about me, and I wasn’t just another body on the floor who could take care of patients.”

Through hearing the participants stories and allowing them to share reflections from their nursing education they verified that the culture of nursing education and the nursing profession limits their desire to rely on their intuitiveness as a way of knowing. The views expressed in this research regarding their desire to blend intuition with science and other ways of knowing were very powerful and validate the need to examine the nature of nursing education and practice.

Chapter Summary

Through listening to the participants’ stories there is no doubt that intuition plays a significant role in their practice as a new nurse. Intuitive mentors helped to form and clarify the meaning and significance of intuition for these novice nurses. Intuition, largely described as a “gut feeling,” was found to be multidimensional and contextualized and defined based on the novice nurses’ spirituality, personality, personal life and health care related experiences.

When accessing intuition these novice nurses shared stories regarding first of all it was important to have self-trust in order for them to rely and act on their intuitions. Going to a place where they could center themselves and hear their inner wisdom fostered self-trust. Self-trust was always validated when they received positive feedback
from both colleagues and patients. Accessing intuition was also fostered by repositioning themselves in time and space as a way to connect to the patient on multiple levels.

The outcomes of utilizing intuition in practice were identified to be that intuition guided their decision-making particularly in ambiguous and difficult circumstances. Additionally, using intuition fostered holistic patient care allowing the nurse to address on body, mind and spirit. Increased patient safety was also noted to be a benefit of listening to intuitive gut feelings.

Courageously and creatively these novice nurses learned how to navigate the issues of power in dealing with doctors, nurse colleagues and other members of the health care team and move beyond perceived limitations of resources to act as a patient advocate and take action based on their intuition.

Reflections on their nursing education and practice, thus far, as a new nurse, revealed that the reification of the medical model, getting mixed messages from nursing professors and colleagues, as well as needing to unlearn the fear of utilizing intuitive ways of knowing alongside rationality were all found to inhibit the nurses’ self confidence, and therefore decrease their willingness to rely on intuition overtly. These participants expressed the desire to find a holistic balance between intuition, science and other ways of knowing and wanting to hear stories from educators and colleagues as a way to foster the development and acceptance of intuitive ways of knowing that enhances rationality in complex clinical situations.
CHAPTER 6

DISCUSSION, CONCLUSIONS AND IMPLICATIONS OF FINDINGS

This chapter will accomplish the following purposes. First, the major points of this study will be brought forward, discussed and summarized, highlighting how they add to, expand on, or diverge from other studies on intuition. Second, the conclusions drawn from this study will be considered, thereby contributing to the meaning of intuition and understanding of how intuition is used in novice practice. Third, implications for the field of adult education and nursing practice will be presented. Lastly, this chapter will then conclude with recommendations for future areas of research.

The existing body of published research on intuition both in the fields of adult education and in nursing, identifies a paucity of research regarding the use of intuition by novice practitioners. The unique feature of this study is that it focuses solely on novice nurses, whereas other studies as identified in Chapter 2, focus on nursing students, expert nurses, advanced practice nurses, nurse leaders or managers. Because novice nurses have largely been neglected in the research arena, the purpose of this study was to assess the meaning of intuition to novice registered nurses and identify how they draw on intuition to guide their practice and decision-making in their first year of working as a professional nurse.

The design of this study grew out of my personal and professional curiosity as the researcher who first, wanted to hear the voices of novice nurses in order to further understand how they make meaning of intuition. Second, the study attempted to identify
how intuition informs these novice nurses decision making and how they use it in their practice. Third, it sought to identify the educational needs of future nurses in order to better prepare them for the fast paced, complex world of practice.

The data analysis revealed that the novice nurses all were able to clearly describe their meaning of intuition, and the particular ways in which they experienced it in practice and in their lives. There were some differences and variations in these descriptions. But before these differences and similarities are discussed, it is first important to articulate the general findings of the study based on the data analysis.

In general, four main points emerged from the analysis of the findings. First, the novice nurses contextualized and defined intuition and confirmed that they utilized intuition as a way of knowing. They grounded their definitions on input from intuitive mentors, who were identified to be significant others and or professional role models. The novice nurses shared their definitions of intuition, as “gut feeling” with multiple sources as its base, including aspects of spirituality, previous life experiences and previous health care experiences. Second, when accessing intuition, the participants commented on the need for a relaxed and supportive environment. These novice nurses felt that being in a relaxed trusting environment, positioning themselves in time and space in the patient’s room and thereby allowing themselves to be connected with the patient on multiple levels all enhanced their intuitiveness. Third, the following outcomes of intuition in practice were identified: improved patient outcomes, navigation of power relationships among members of the health care team, and successful maneuvering around limitations of hospital as well as human resources. Fourth, according to these participants, the culture of both nursing education and practice, continues to reify the
medical model, impart mixed messages regarding ways of knowing, and instill hesitancy and/or fear in those who rely on intuition and other nonrational ways of knowing as additional sources to guide their practice. Professors encourage students to pick up on their patients’ subtle nonverbal cues, and assess the patient holistically; yet, at the same time, they are told to back up their findings with scientific facts. As a result of these polemic situations, the novice nurses receive mixed messages both in education and in practice regarding acceptable ways of knowing. In order to rectify this quandary the novice nurses suggested strategies to find a balance between intuition, science and other ways of knowing.

Discussion of the Findings

Recognizing the general findings as stated above, it is important to now consider plausible explanations for these findings. Thus the structure of this discussion will be built on the following foundations. First, the unique features of the participants will be presented. Second, novices use of intuition as a way of knowing particularly in complex, ambiguous situations will be considered. Third, an examination of intuition as an extension of connected knowing will be explored. Fourth, the notion of a being relaxed in a supportive environment will be discussed. Finally, the reification of the medical model in nursing education by those who propagate it will be analyzed.

Unique Features of the Participants

These participants have several unique features that need to be kept in mind when evaluating the results of this research. First, as stated above, the most unique feature of these participants when comparing them to previous research, is that they are all novice practitioners in the first year of their practice as a registered nurse. Their work experience
ranged from two months to 12 months. They were very dedicated to the care of their patients and were truly interested in their patients’ wellbeing and state of health. Additionally, they clearly articulated the special relationships they developed with their patients that fostered their intuitiveness. Collectively when looking at this group of novice nurses one could sense the vigor and excitement they had for their profession. At the same time, one could sense the trepidation they felt as they embarked on new learning experiences and challenges.

Second, these novice nurses all had a high cumulative grade point average (greater than 3.0) upon graduation from their baccalaureate nursing program. Students with a high grade point average, may have a higher self-esteem and therefore be more confident in acting on their intuition. Furthermore, they may have been covertly using multiple ways of knowing in combination with rationality all along in their education and thus feel more comfortable relying on multiple ways of knowing, including intuition now.

Third, these novice nurses had a high self-perception of intuitiveness as previously measured by the Miller Intuitiveness Instrument. Nurses with a high self-perception of intuition may be more likely to draw on this way of knowing in their practice than those who do not have a high self-perception on intuition. These participants obviously drew on intuition in practice as clearly exhibited in their many examples and clinical stories.

Fourth, it is important to keep in mind when reading the results of this study that these participants were part of a quantitative study that was conducted less than a year ago which also investigated intuition (Ruth-Sahd & Hendy, 2003). As a result of participating in this study, these participants could have been sensitized to the concept of
intuition and therefore were more aware of it in their practice. More importantly from participating in the previous research study, the participants learned that intuition was valued and accepted as a way of knowing at least among some nurses and nursing professors. This may have resulted in their greater use of intuition and/or their willingness to openly discuss how they draw on it in their practice.

Fifth, this study involved 12 women and four men. While this seems to be based more on women, the sample used here is representative of the proportion of the nation’s women-men ratio in nursing. According to a 2000 survey by the Division of Nursing of the United States Department of Health and Human Services, of the nation’s 2.7 million registered nurses, an estimated 146,902, or 5.4 percent, are men (Sagon, 2003). Although intuition was once thought to be associated with a gendered way of knowing in the world – i.e., “women’s intuition” this research shows that the men in this study are equally as intuitive as the women are and use intuition to guide their practice just as much as these women.

Sixth, the participants in this study are younger than those studied in other nursing intuition research studies. This is largely because these participants were novice practitioners, who were just embarking on their career, whereas the participants in the other studies had accumulated years of experience. This particular group, being between the ages of 21 to 27, may have experienced power issues based on their younger age, when confronting the older members of the health care team regarding their intuitiveness.

Lastly, many of these participants had job related experiences during nursing school. Six of the participants worked as nurses aides, two worked as nurse externs between the summer of their junior and senior year of college, and two were previous
emergency medical technicians and continued this work throughout nursing school on a limited basis. While this is roughly half of the participants, those participants that did not have such experiences also reported using intuition in their practice. Yet one must wonder how these prior experiences affected their intuitiveness. Additionally, when considering the Dreyfus and Dreyfus model of skill acquisition (1986), despite these work-related experiences, they would still be considered to be in the novice level of skill acquisition. Benner and Tanner (1987) as well as others (Rew, 1991; Schraeder and Fischer, 1987) posit that novice practitioners do not have the capability or experience base to access intuition, yet, these job-related experiences may certainly provide the experiences necessary to enhance their intuitiveness.

In summary, the most significant unique features of these participants are that they are novice nurses with limited experience and are younger than nurses involved in previous research studies on intuition. Furthermore, they all had a high self-perception of intuitiveness, which validates that they believe in the value of intuition in their life and therefore will carry over into their practice. These unique features of the participants may partially explain some possible reasons for these findings.

Novices Use of Intuition as a Way of Knowing

Many of the participants described intuition as a “way of knowing.” This description of intuition is consistent with the work of Carper (1978) who first defined intuition as a “way of knowing in nursing” (p. 13). Intuition seemed to present itself to these novice nurses when dealing with complex situations where they had to make very quick decisions and were not aware of which direction to go. Schön (1987) and later Hirst (1996) identified that professionals work in complex and multi-faceted environments that
demand a new rationalism that involves far more than cognitive knowledge. Intuition is different in that it does not privilege knowledge as it is conventionally defined. Rather, intuition centers itself on ‘ways of knowing’ that include knowledge, gut feelings, emotions, spirituality, hunches, and recognizing complex patterns. Intuition therefore must be viewed alongside rationality. The usual discourse of dichotomizing rationality and intuition needs to be reframed: clearly it is a false dichotomy.

This intuitive knowing that existed alongside of rationality afforded the nurses in this study the opportunity to recognize patterns allowing them to anticipate what may occur in the future, put patient data together in a rapid manner and consequently, act on behalf of their patients to prevent deleterious events from happening. Many of the participants believed that once they acted on intuitive knowing, it saved their patients’ lives.

Intuitive knowing was manifested by these participants and clarified to be a “gut feeling” or “way of seeing.” These “voices of intuition” were in some ways consistent with what was evident in the existing literature and historical analysis but in other ways further clarified this body of knowledge. Vaughan (1979), as stated in chapter 2, described the physical, emotional, mental, and spiritual voices of intuition. While these were noted by some of the participants, the majority spoke about intuition presenting itself as a physical feeling coming from the body, a “gut feeling” or a “feeling of uneasiness” that happened without previous thought and they could not clearly articulate why they felt uneasy. In addition several of the participants attributed intuitive knowing to personality traits such as being open-minded (Karen, Lily), creative (Tina and Tonya) or spiritual (Diane, Emma, Ethan).
When intuition was acted on in practice, these novice nurses shared scenarios regarding how patient care was enhanced. They offered many points for consideration when implementing intuitive knowing in practice. They suggested that “even though a novice nurse might not feel confident acting on their intuitiveness, they should always acknowledge it and discuss it with someone rather than ignore the feeling” (Austin). They strongly believed intuition improves patient outcomes and saves lives. Additionally, they believed that it could be very harmful to the patient if one ignored their intuitiveness. Previous researchers also shared these feelings. Agan (1987), as well as Benner and Tanner (1987) noted that the application of intuitive knowing in practice enhances patient outcomes. Pyles and Stern (1983) also noted in their study that if intuition is ignored and not used, it could have a negative effect on patient care.

When acting on and listening to intuitive knowing in practice, it not only improved patient outcomes, but also assisted the novice nurse to navigate power relationships among members of the health care team, and guided them when maneuvering around limitations of hospital as well as human resources. It is a given that doctors have power over nurses and that senior nurses have power over new nurses, yet these novice nurses used their intuition to assist them to deal with these power relations to benefit their patients. These findings are very relevant to the field of intuition and nursing practice because little is known regarding the actual outcomes of intuition in practice (Davis & Davis, 2003) and even less is known regarding the use of intuition by novice practitioners. This study indicates that novice nurses do value, use, and rely on intuition to guide their practice and more importantly intuition affects their practice in a positive way.
Consistent with the existing literature, these participants continued to be perplexed by the exact source of intuitive knowing. These novice nurses described intuition as grounded in one or more of the following areas: as coming from God, as an innate personality trait, as an inner knowing, and as building on past experiences. This research adds two key points to the existing body of literature regarding the source of intuition. First, these nurses, instead of identifying one source, as philosophers and researchers did in the past, were more comfortable with identifying several sources presenting a more multidimensional view of intuition. Second, the emphasis that they placed on past experiences informing their definition and meaning of intuition is significant. For these participants their meaning was strongly rooted in what they experienced in the past, mainly personally, but also professionally.

*Revisiting “Women’s Ways of Knowing”: Intuition as an Extension of Connected Knowing*

Revisiting “women’s ways of knowing” as posited by Belenky, Clinchy, Goldberger & Tarule (1986) is necessary to identify how this theory informed this study. Women’s ways of knowing as discussed by Belenky et al. (1986), and considered further by contributing authors in Goldberger, Tarule, Clinchy & Belenky (1996), have received increased attention in the field of adult education, especially from a psychological feminist perspective (Hayes & Flannery, 2000). Picking up on Perry’s work dealing with how male college students learn and make meaning, Belenky et al. (1986), describe ways women know and suggests that women come to know differently than men. They found that women speak of the importance of personal experience to knowledge, of connected approaches for knowing, resistance to certain types of knowing, and the value of inner
knowing. Whereas men, they suggest, in building on Perry’s work, tend to seek knowledge that is separate, linear and rational in nature. It is this rational knowledge that is considered to be the more respected form of knowledge as noted by Hayes and Flannery (2000), Hogarth (2001), and Tisdell (2003) in higher education and by Benner (2001), McCormack (1992), Miller and Rew (1989), Rew (2000) in nursing education. However it is important to point out that the four men within this current study did not do anything differently as far as seeking knowledge or accessing and validating intuition than the women in this study did.

Belenky’s et. al., (1986) work is relevant to consider in this study because they brought to the fore honest discussion about how affective, subjective, connected and constructed ways of knowing among the participants in their study has implications for ways of knowing for all people, women or men. This was indeed true in the findings in this present study, as participants valued connected knowing irregardless of their gender. Belenky et. al. noted that for some women to “speak in a unique and authentic voice” they engage in what they call “constructed knowledge” (p. 134). Constructed knowledge is defined as the blending of subjective knowing and objective forms of knowing. While higher education seems to promote and legitimize objective forms of knowing, there is a tendency for women to adapt by “integrating knowledge that they felt intuitively was personally important with knowledge they had learned from others” (p. 134). Within Belenky’s et. al. (1986) work, many of the women described how they merged objective and subjective forms of knowledge in order to synthesize their own personalized form of knowing. In this study, female as well as male participants blended or connected rational with nonrational forms of knowing.
Adding to Belenky et al.’s work, this study highlighted the significance of the notion of time, space, and touch when making connections with others to enhance their intuitiveness. While some participants needed to have “enough time” or “have time that was uninterrupted,” others voiced that they discovered their intuition in the spur of the moment while engaged in life threatening situations. Additionally, participants also needed to put themselves in a certain place in space in order to pick up on their intuitive hunches from others. They explained they would do this by, standing at the foot of the bed, sitting beside the bed or tinkering around the room to be present with the patient for longer periods of time.

Belenky et al.’s work discusses subjective knowing (p. 68) where women redefine the notion of authority as being from within themselves rather than being from external sources. The participants in this study, because of their lack of self-confidence continued to see the source of authority primarily external to themselves. This was evidenced by the fact that they often stated they wanted to “run their intuitions by more experienced nurses.” Similar to Belenky et al.’s work however, these participants were shaky about their own intuitive judgment but were proud if others affirmed their intuitive hunches and conclusions.

Belenky et al.’s work has been the subject of many debates particularly because it falls short of identifying the role of social positioning in the generation of knowledge. The participants in this study revealed that social influences from their co-workers and mentors were a major influence in both their ability to access and willingness to act on their intuition. The novice nurses’ stories provided valuable information regarding the value of “connections.” These participants talked about the significance of connecting
with themselves, connecting rational with nonrational forms of knowledge, connecting
with intuitive mentors, connecting with previous life experiences, connecting with the
patient in the nurse-patient relationship, connecting with the doctor, in the doctor-nurse
relationship, and connecting to other members of the health care team.

The participants’ stories illustrated how their ability to access their intuition was
directly related to whether or not they felt comfortable and connected with themselves.
Several of the participants practiced yoga, meditation, and Tai chi, others listen to music
and read self help books to connect with their inner self and feel more “in tune” and
“centered.” These participants felt that it was just as important to be able to connect with
their own inner self and hear their own inner wisdom as it was to connect to others.

These nurses talked about the value of connecting intuitive knowledge and other
nonrational forms of knowledge such as spirituality and affective knowing with rational
scientific ways of knowledge. They believed using multiple ways of knowing in
combination enhanced their repertoire of ways of knowing and allowed them to provide
holistic care to their patients. All of the participants valued and understood the relevance
of having a solid knowledge base but they were quick to identify that they felt this was
not enough. Kaitlyn explained it this way:

In nursing school, I was taught to compare the patient to the textbook. I found that
this does not always work. At times using rationality and science works, but other
times, especially when I am feeling very uncertain, I go with my gut to
complement science. Usually time does not permit me to check with someone else
or look it up in the nursing books because I have to act quickly or my patient will
die. I usually listen to my gut first and then back it up with textbooks if I have time.

Connecting with intuitive mentors was another way that these participants contextualized and defined their definition of intuition. Mentors were identified to be significant others or professional colleagues who role modeled how intuition worked in their lives or practice. Role models and mentors have been found to be significant in the learning in novice practice (Daley, 1999; Daloz, 1999). Daley, using a qualitative approach and interviewing novice nursing practitioners, found that their learning and knowing was directly related to their ability to connect with people who had more experience.

These participants highlighted the significance of connecting with previous experiences. These experiences included both life and work experiences. For these participants, their life and personal experiences were very significant, if not even more significant than their professional experiences. With the exception of one quantitative study (Ruth-Sahd & Hendy, 2003), research prior to this study, strictly focused on work and professional experiences. Agan (1987), Corcoran-Perry and Bungert (1992), posited that personal life experiences are indeed relevant to the development of intuition. Daley (1999), in the study noted in the previous paragraph, found that nurses “sorted information based on past experiences, thus using these experiences as filters to assist in the learning process” (p. 142). Oftentimes these life experiences lead these participants into the field of nursing and additionally, lead them into a particular specialty area of nursing. For example, Diane, due to a family history of various psychiatric diseases, and she herself suffering from a bout with depression, chose to go into psychiatric nursing.
Diane states that having these past life experiences enhanced her self-perception of intuitiveness in psychiatric nursing.

The participants also discussed the relevance of forming connections with their patients to better access their intuition. While the significance of the nurse patient relationship is not anything new in the literature (Agan, 1987; Benner & Tanner, 1987; Correnti, 1992; Davis-Floyd & Davis, 1996; Leners, 1992; Rew, 1988a; Riley, 2000; Schraeder & Fischer, 1987; Smith, 2003) this research adds how the novice nurses went about forming a therapeutic relationship and “connecting” with their patients. They accomplished this by spending time with them as well as placing themselves physically in a space that allowed them to take in the entire patient situation. According to Tonya, positioning herself close to the patient allows her to “see everything and hear what is not being said.” This expands on the notion of environment as noted in the previous literature by adding the relevance of the nurses positioning of themselves in order to be more receptive to intuition and patient cues. By doing these things the novice nurses felt as though their intuitiveness was enhanced. The most beneficial outcome of developing this relationship with the patient, according to these participants was to be able to pick up on subtle patient cues that may have otherwise been overlooked or ignored by the nurse going about her routine nursing care. Not only did the nurses connect with the patient but they described how they would put themselves in a space where they could pick up on intuitive cues and identify physiological and psychological needs of their patients.

One of the prerequisites to forming patient connections was having enough time. One significant piece of knowledge gathered from this research indicates the significant need for “time” when connecting with patients in order to access intuition. According to
Linda, “time is a huge factor.” Linda, Tina, Karen and others noted that they perceived their intuitiveness was directly related to the amount of time they were able to spend in the patient’s room, at the bedside, observing, talking, touching and listening to the patient. Several novice nurses stated that they felt more intuitive on night shift because “patient care was not interrupted like it is on day shift. You don’t have to round with physicians, transport patients to and from therapy or testing, answer phones and do non nursing duties.” The issue of time was discussed in the literature as far as timing of patient education (Arnold, 2003) to determine readiness to learn, but did not address time as far as spending quality uninterrupted time with patients.

Another connection that was significant to these novice nurses, and directly related to their willingness to act on their intuitive knowledge, was their ability to connect with the doctor, and form a collaborative, respectful, working relationship. When a collaborative relationship existed between nurses and doctors, the nurses states they felt as though they could address their intuitive hunches with the doctors. However when this relationship was not present and when they received resistance toward their intuitive ways of knowing by pejorative, irreverent and ridiculing comments, this, in some cases, prevented them from acting on their intuition. Other times the nurses would navigate around the physicians by speaking to a nurse supervisor, or by obtaining patient orders from another doctor that was on the case with whom they felt more comfortable dealing with.

Relationships between doctors and nurses have traditionally been that the doctor gives the orders and the nurse, without asking any questions, is to carry out those orders.
Nurses are taught to carry out the doctors’ orders. While this is slowly changing, the stories from these nurses evidenced that this mentality continues to be present.

Lastly, the nurses expressed the importance of connecting with other members of the health care team. The current study revealed that when desiring to act on the outcomes of intuition, the novice nurse would at times check with other more experienced members of the health care team with whom they had developed a trusting collegial relationship. The participants would not collaborate and seek feedback from just any one; rather they would seek out someone they trusted and “someone they knew would not talk badly about them” according to Allison. Several studies (Agan, 1987; Benner & Tanner, 1987; Correnti, 1992; Rew, 1988a; Schraeder & Fischer, 1987) spoke to the importance of a therapeutic relationship between the nurse and the patient as being a precondition for intuition. However these studies did not speak to the relationships among members of the health care team to identify how these relationships may impact the intuitive process. Even the latest text books on interpersonal relationships in nursing, (Arnold & Boggs, 2003) address every possible dyad between the nurse and the patient but fall short of mentioning how to communicate effectively with other members of the health care team in order to effectively provide patient care.

**Being Relaxed in a Supportive Environment**

The notion of a safe trusting environment as suggested in the literature by Emery (1994) was very important to these participants. Emery believed that the environment for hearing intuition must be relaxed, and that the individual must be centered to experience the inner wisdom of intuition. Many of the participants agreed with this. Some of them stated that when they feel rushed or short staffed they were less likely to hear their
intuition because they were too busy. Many of the participants practice yoga, meditation, or other techniques such as spiritual practices, listening to relaxing music to center themselves, or going to a quiet place in order to make better patient care and life decisions. While the participants recommended these practices, they did not feel that they were mandatory for intuition to happen, as they recognized the many clinical situations where instantaneous intuition occurs.

Besides a quiet inner environment, the participants also spoke of the need for a safe, trusting, collaborative environment in the clinical setting and in the classroom, where supportive professional relationships were present and consequently they felt safe to openly discuss their intuitions without the fear of ridicule. And as stated previously, the novice nurses not only valued the relationship with their colleagues but also valued the relationships with their patients. Olivia sums it up this way:

Having staff and patient support, being treated with respect and kindness, and having my opinions honored gives me the positive reinforcement that I need. I can then trust myself as well as feel comfortable enough in the environment to act on my intuitions without the fear of having to back everything up with a scientific rationale. I am also able to pay closer attention to what my intuitive feelings are, if I am less worried about who is saying what about me.

Many participants agreed with Olivia and noted that if team members were supportive, they could openly discuss their intuitions, whereas if they weren’t supportive, they would not be as willing to discuss or rely on intuition. This is explained by the fact that people do not develop in isolation, but rather as a result of attitudes and behaviors of other people in the team who model and feedback (Hawkins, 1998). Team
communication skills are a significant dimension of professional growth in nursing (Arnold & Boggs, 2003). Team members have the power to influence the novice nurse’s professional growth and development in many areas including which ways of knowing they utilize to guide their practice. Daley’s study (1999) investigating how professionals learn found that novice practitioners need to validate their information through peer-based dialogue and would change or revise their practice based on such discussions.

This research adds to this dimension of communication and relationships by emphasizing the significance of team member relationships and how this affects novice nurses’ willingness to act on their intuitiveness. Secondly, the findings here broaden the work of Emery (1994) on the need for a safe trusting environment in the classroom to enhance learning, by now emphasizing the need for this same environment to be present in the clinical setting as well.

The notion of a safe trusting environment was interrupted by fear. These participants voiced two main causes of fear as being fear of ridicule and fear of causing their patient harm or injuries. This fear inhibited their use of intuition in practice. Participants reported being less fearful if they based their practice on science and rationality and being more fearful if they were relying on unaccepted ways of knowing such as intuition. This sense of fear may be explained in several ways. First, being a new practitioner, there is typically some degree of fear associated with being overwhelmed learning the new skills, and fear of making a mistake or harming someone. Second, the fear that occurred due to using unacceptable ways of knowing may originate from their nursing education, as well as prior educational experiences. Hogarth (2001) states that we adapt to the environments to which we are exposed. The environment of nursing
education continues to be rooted in the medical model and propagates positivism. As a result this is what the students fashion their practice to reflect. If nursing educators promoted multiple ways of knowing by role modeling and maintaining an attitude of acceptance, and helped students examine the dominant discourses surrounding ways of knowing, students would unlearn the fear associated with ways of knowing outside of the rational domain.

_Revisiting Cognitive Learning Theory: Moving Beyond Positivism to Integrative Ways of Knowing_

Looking back at cognitive learning theory (Bruner, 1966) and other theories related to cognition (Hammond, 1996) that served as the theoretical framework for this study, one now learns after hearing the voices of these novice nurses that these theories do provide a theoretical framework that represents some of the ways novice nurses think and make meaning. Yet, this research further supports the need to understand the constraints and limitations of cognitive learning theories that focuses purely on rational and positivistic ways of knowing.

While historically rationality has long been considered to be the respected way of knowing at least in this Western culture, these nurses clearly articulated the importance of nonrational ways of knowing such as the intuitive, affective, emotional, spiritual, and unconscious aspects. These findings evidence how nonrational ways of knowing worked alongside, or outside, the realm of rationality to enhance the practice and decision making of these novice nurses. As Hogarth (2001) suggests, intuition works within a complex system for processing information. Thus cognitive learning theory needs to begin to
address the multidimensional aspects of knowing that are obviously a part of the knowledge construction processes that are embedded in cognition.

The importance of multidimensional ways of knowing is not necessarily a new idea. Almost a century ago, Henri Poincaré (1913), likely to be the best-known modern day mathematician, as well as many others noted in the historical analysis of intuition, attested to the weakness of rationality as a solitary form of knowledge. Poincaré proposed to the science community that “pure logic could never lead to anything but tautologies” and continued by saying “you can rise to your logical ideal only by cutting off the bonds that attach you to reality. Your science is infallible, but it can only remain so by imprisoning itself in an ivory tower” (p. 108). Similarly, Goldberg (1983) stated some 20 years ago:

If ever an age cried out for intuitive wisdom it is ours. Yet the educational institutions that teach us how to use our minds, and the organizations in which we use them, have not been structured to nurture intuition. We need to change this and make a high priority of understanding how the intuitive mind works… By developing knowers whose subjective skills match the precision and reliability of our objective methods, we can harness a vital resource for humankind (p. 214).

Judging by the stories and experiences of these novice nurses as they reflect back on their experience in nursing school, it seems that Goldberg’s call of 20 years ago is still relevant to the age of today. It also appears that these nurses relied on other ways of knowing outside of the objective knowledge of positivism to inform their practice.

It is important to note that there are both nurse researchers (Benner, 1982; Miller & Rew, 1989) and adult educators more generally (Atkinson & Claxton, 2000; Bruner,
1966; Dirkx, 2001; Hogarth, 2001; Taylor, 2001; Tisdell 2003) who have voiced the same need to include other ways of knowing in teaching and learning as well as in practice arenas. Knowing this, one must ask why these novice nurses continue to voice a lack of inclusion regarding other ways of knowing in their nursing curriculum.

Could it be that adult nursing educators, because of the fact that they are in a science discipline that has reified the medical model based in positivism are more concerned with covering content than with challenging students to recognize and utilize diverse ways of knowing? Could it be that despite the fact that the nursing profession is based both on science and on caring for human beings, nurse educators are so entrenched in the medical model that emphasizes positivism and cause and effect relationships that can be measured, that they are blinded to diverse ways of knowing? Could it be that educators in these health care professions try so hard to reduce errors and failure that students have little opportunity to practice without having a sound scientific rationale for their interventions? Could it be that educators carry on the same pedagogical strategies and values that they had been taught? Could concerns about student and administrative evaluations, as well as promotion and tenure conditions, leave little room to promote teaching strategies that foster the development of intuitive, holistic knowing, even though nursing is based on hard science, and caring for human beings? Could these concerns lead adult educators to use safer, more traditional strategies to teaching, rather than trying new pedagogies that encourage students to think, reflect and utilize diverse ways of knowing? Although these questions are not answered within the present study, one learns from these participants that it is time to investigate the rationale as to why these questions
have remained unanswered. Diane verifies the need to answer these questions by her following statement. Diane feels that she is a very intuitive person but stated that:

It [her nursing education] encouraged pure scientific rationales for interventions and I had to have my nursing interventions grounded in the nursing care plan and cited from a textbook or it would not be graded well in clinical. I always had to prove myself.

Diane further added that her colleagues would say, “you are too new to be that intuitive. How do you know?” When she couldn’t back her knowledge up with facts or rationales she would feel intimidated and be less likely to openly talk about her use of intuition again.

The participants revealed that the culture of nursing education and practice continues to reify the medical model, impart mixed messages, and instill trepidation, hesitancy, and fear in those students and practitioners attempting to rely on intuition to guide their practice. These mixed messages are coming from the fact that students are seeing this as an either / or situation and are not encouraged to see how intuition AND rationality can work together to provide holistic patient care. This study suggests that adult nursing educators find ways to encourage a balance among intuition, science and other ways of knowing. Even medical education is beginning to incorporate more holistic ways of knowing. Currently more than half of the family practice medical schools in the United States now incorporate information related to spirituality and complementary and alternative medicine in the curriculum (Goldstein, 1999; Sloan, Bagiella & Powell, 1999; Ziegler, 1998) even though medical education and medical practice continues to be dominated by the positivistic medical model.
Implications for Theory and Practice

The findings of this study suggest several implications for theory and practice. The implications for nursing theory and practice will be discussed first followed by a discussion of the implications for nursing education. While formal education and continuing education is the focus in this section, the findings also have implications for formal learning that occurs in the workplace.

Nursing Theory and Practice

Recognizing that theory drives practice, and in turn practice drives theory, it is necessary to acknowledge this reciprocal relationship to identify how one drives and informs the other. Similarly, what is taught in the classroom presents itself in practice, and the demands of practice determines what is necessary to include in the curriculum.

According to Diekelmann (2003) the contemporary worlds of nursing practice and education are much more complex than they used to be. She identifies the following reasons for this: high patient acuity, fewer experienced nurses at the bedside because of the nursing shortage, rapid patient turnover, increased student-teacher ratios due to the shortage of nurse educators, and the persistent infusion of technology. These changes in health care and education are making innovation and reform imperative in both nursing education and practice. Novice nurses today must know how to read clinical situations in a critical health care environment in which patients are rapidly changing. This ability is fundamental to providing safe quality patient care. This demands the application of a full artillery of ways of knowing because oftentimes basing decisions solely on rationality is too slow (Schön, 1983, 1987) and secondly, intuition is an additional way of knowing that is very helpful in dealing with complex situations (Atkinson & Claxton, 2000).
Keeping the above points in mind, the findings of this study have significant implications for nursing theory and practice. All the nurses in this study talked about intuition being an advantageous gut feeling, which is essential to holistic practice. Their intuitions as well as their gathering of medical and nursing facts guided their assessment, afforded them the opportunity to provide holistic care, and allowed them to connect on multiple levels with their patients, thereby improving patient outcomes. The following recommendations for both theory and practice may be made.

First, as a result of this study and learning that intuition is indeed a way of knowing in novice practice, and is recognized as a universal characteristic of human thought (Bastick 1982), the Benner novice-to-expert model needs to be revisited to address the place of intuition by practitioners other than solely advanced practitioners and experts. We must align ourselves with the thinking of other nursing theorists such as Carper (1978), Miller (1993), Pyles and Stern (1983) and Rew (1987) who propose that all nurses use intuition in all phases of their practice. Furthermore, the concept of novice may not be accurate for many new nurses. Although they are novices to the profession, oftentimes these neophyte practitioners in order to gain experience participate in externships or work in their fields as aids or apprentices (Rhoads, Sensenig, Ruth-Sahd & Thompson, 2003). As a result of these experiences, they have a wealth of clinical wisdom to rely on when they begin their practice.

Nurse recruiters, when interviewing potential new nurses, may want to ask them during the interview process how they make decisions in practice and what ways of knowing they rely on. In addition, the nurse recruiter will want to take into consideration
the nurses’ past life experiences, as well as nursing experiences, realizing that these experiences will inform their practice.

Staff and clinical educators have the responsibility to pick up where the nursing education curriculum has left off and encourage ongoing learning in the workplace. Continuing to promote clinical practice that is based on multiple ways of knowing and not solely on medical, scientific based knowing will enhance quality patient care. Clinical educators may want to involve new nurses in group learning activities as a way to increase intuitiveness (Zelman, 2002) and increase the new nurses self-trust on their intuitiveness (Miller, 1995).

Nurse managers recognizing the importance of the nurse-patient as well as nurse-nurse, and nurse-physician relationships, as identified in this study, will want to make appropriate patient assignments so novice nurses have the “time and space” they require to “connect” with their patients and get to know them. While this may be challenging in light of the nursing shortage, patient assignments must be carefully planned to facilitate this interaction if possible. Additionally, an assessment of these relationships may be incorporated as part of the nurse’s performance appraisal process.

When matching novice nurses up with preceptors and mentors, the manager will want to take into consideration ways of knowing that are utilized by the experienced nurse so that he or she can be a role model to the new nurse. Lastly the nurse manager may further draw attention to the importance of intuitive practice by placing it on the monthly staff meeting agenda.

Mentors in practice as well as in education need to share stories about holistic ways of knowing. Although this often takes place on an informal level, a more formal,
structured method was desired by the participants in this study to validate the relevance and usefulness of intuition in practice. Experienced staff development instructors, mentors and preceptors need to acknowledge and validate the usefulness of intuition in practice. By sharing their stories about intuition, allowing the novice nurse to ask questions regarding intuition and fostering trusting, open relationships where the novice nurse feels free to ask questions without the fear of ridicule is beneficial to the development of intuitive practice.

According to the participants in this study, spirituality and knowing oneself was seen as an important source of intuition and informed their use of intuition in practice. As nursing becomes more and more complex, and more and more demanding, it is important for hospital administrators to recognize that nurses need time to evaluate, self-reflect and debrief on incidents that occur in life and more importantly incidents that occur in practice. Staff development educators concerned about the development of the whole person may offer classes on meditation, yoga, reflection, or other techniques that foster self awareness and intuitiveness.

**Adult Nursing Education**

These findings have implications for adult nursing education in two separate areas: undergraduate baccalaureate nursing education and continuing professional education, whether it be in hospital staff development or conferences outside the hospital where the nurse is provided with a certificate of continuing education credits.

Because all of these participants validated the use of intuition in their novice practice, nursing educators must seek ways to include and foster the development of intuition throughout various levels of the nursing curriculum. Educators must first begin
by reflecting on their own teaching philosophy and recognize that the way they practice is based on their own philosophy of teaching and learning.

Second, educators must acknowledge that the current practices in nursing education are rooted in the medical model and functions from a very positivistic perspective, valuing scientific and rational principles. Although education focusing on rationality is relevant to nursing and quality care of patients since all nurses need to know medical and nursing facts, nursing education must also recognize the value and relevance of other ways of knowing as being important in quality nursing care. Educators must look outside of nursing and recognize that the formal educational system itself, is based very much on rationalistic doctrine (Dirkx, 2001). On the other hand, as positivism and rationalistic doctrines are continuing to be questioned and technical rationality is proven to be insufficient in practice (Schön, 1987), educators in all disciplines are beginning to realize the significance of holistic, humanistic approaches to practice, teaching, and learning.

Third, educators must recognize that nursing encourages linear ways of knowing and problem solving as evidenced by the nursing care plan, a very linear, step by step model which has guided nursing practice for centuries and continues to guide practice today (Ackley & Ladwig, 2002; Potter & Perry, 2001). Recognizing these truths, adult-nursing educators must help students to see the place of intuition and other ways of knowing when formulating the nursing care plan. When teaching the nursing process, educators may present how intuitive knowledge may be implemented to develop the nursing diagnosis, goals and interventions to enhance the care plan and make it more holistic and individualized to the patient. Encouraging multiple ways of knowing, in
conjunction with rational, linear approaches weaves together an educational curriculum that is more humanistic and holistic. This teaching philosophy is most consistent with what the participants in this study stated they appreciated and learned from, both in the classroom and in their individual practice settings.

Hogarth (2001) and Atkinson and Claxton (2000) contend that intuition can and should be taught. Educators may facilitate intuition by telling stories, pairing students together to foster awareness and connections, playing music to quiet the learner and facilitate listening to their inner voices. Because intuition is grounded in prior learning and experience as noted by these participants, providing the student, or novice practitioner, with time to reflect on previous life and clinical situations may enhance their intuitiveness. Another way to encourage intuition would be through the use of artifacts or metaphors to symbolize different types of knowledge and enhance the students awareness of how they work together to enhance patient care.

Fourth, feminist / humanist perspectives toward teaching may be incorporated into the nursing classroom. A relationally-driven philosophy, rooted in the work of Belenky, et al. *Women’s Ways of Knowing (WWK)* (1986) and grounded in humanistic psychology “emphasizes the significance of relationship and affectivity as learners construct new knowledge” (Tisdell & Taylor, 1999, p. 9). The emphasis here is on relational and affective learning as well as the rational. Although Belenky’s work was based solely on women as learners, Tisdell and Taylor (1999) posit that this paradigm is applicable to both male and female learners. Women are generally thought to be more intuitive than men. However Hogarth posits that this is largely because of “cultural stereotypes that women make more accurate interpersonal judgements than men” (2000,
p. 161). The participants in this study clearly articulated the importance of relations and connecting with themselves, their patients, as well as members of the health care team. Within the feminist/humanist philosophy, the purpose of education is not only to help learners give voice to new knowledge in a relational community of support, but also to focus on the personal development of each learner, including the relationship one has with oneself (Tisdell & Taylor, 1999). Student-centered education, focusing also on the student’s internal development of intuition based on previous life and professional experiences, will permit the nursing educator to foster the use of intuition in practice.

Fifth, those professors in adult and higher education who are interested in fostering intuition in their classrooms may want to collaborate with other colleagues who are knowledgeable about these ways of knowing. Another consideration would be to attend continuing education seminars that foster holistic ways of knowing outside of rationality. None of us are fully aware of all the ways that we have internalized the values and behaviors of the hegemonic cultures that contributes to our ways of teaching. Many of the participants stated how much they learned just by participating in this study.

Sixth, the adult educator concerned about multicultural education, when considering issues of race, class, and gender must also consider the unique ways of knowing that various cultural groups utilize. It must also be recognized that each student has his or her own unique approach to meaning-making and knowing (Ruth-Sahd, 2003). Furthermore, intuitive forms of knowing may be valued differently by different cultural groups. The student population in our classrooms and the patient population in our health care environments are becoming much more culturally diverse and therefore creating an
educational curriculum that takes into consideration the needs and experiences of the diverse learner is imperative.

Seventh, the participants in this study voiced how they appreciated learning in an atmosphere where: they were respected and valued, the professor shared stories about her or his own past experiences, and professors and colleagues valued their own unique ways of knowing. Adult nursing educators concerned with creating an atmosphere in their classroom that enhances learning will: value a student’s dominant cultural ways of knowing and meaning making; create a climate of curiosity and questioning that captures the diverse experiences of the students; instill in the students a sense of creativity, a tolerance for a degree of uncertainty, and a futuristic perspective; design learning objectives that focus on process and skilled pattern recognition as well as content; and encourage students to compare similarities and differences among clinical situations, and assess patients with a holistic perspective, using their senses and intuitive hunches, as well as objective scientific data (Ruth-Sahd, 2003). Most importantly, students will be introduced to the truth that there is more than one right way of knowing and be encouraged to consider multiple ways of knowing including intuition.

Eighth, participants highlighted the importance of forming connections among doctors and among other nurses and members of the health care team. Based on this, time must be spent in the undergraduate curriculum teaching how to effectively communicate with colleagues, navigate power relations (be they male or female), and work within the limited hospital and human resources. This will become an especially significant aspect of nursing education and better prepare the graduate for the world of practice once the nursing shortage reaches its projected peak in the year 2020 (AACN, 2003). Furthermore,
the notion of intuition being a “women’s thing” did not appear to be relevant and must be
clarified in the education process. While most of the participants in this study were
women, the four men in this study reported that they accessed intuition and based their
practice on intuitive knowing in the exact same way as the women did. While intuition
might be gender related, it was not found to be gender specific within this study. Graham
and Ickes (1997) summarize that women do possess a greater ability than men to respond
emotionally and decode nonverbal communication, which likely enhances their
intuitiveness.

Lastly, as Bruner (1977) and Knowles (1980) recognized that adult learners are a
product of what they experience. Educators today may consider utilizing pedagogical
strategies that create or simulate experiential learning to increase the experiences of the
student and thereby foster an awareness of intuitiveness. Some of the ways to accomplish
this is through creating a hands-on learning environment where the students participate in
and experience and creative learning activities such as case studies, role plays, self-
reflection, self-awareness, story sharing, meditating, working in collaborative work
groups, and journaling to foster intuitiveness. Hogarth (2001) also recognizes the
importance of experience and recommends that individuals participate in behavioral
simulations where they are confronted with negative consequences of their usual ways of
decision-making so they may see how these ways of knowing fall short.

Recommendations for Future Research

The research on intuition has been confusing and sometimes contradictory. This
study, although it adds to the body of knowledge, does not answer all the questions
regarding this topic, and has its limitations. In order to further the fields of adult nursing
education and nursing practice, further qualitative and quantitative studies must be undertaken to further clarify the concept of intuition. I will mention only a few.

This research was conducted on a small, fairly homogeneous sample of novice nurses. Further research should replicate this study using more men and including participants from diverse cultures to see if the findings are similar and consistent especially considering that diverse cultures value ways of knowing unique to their culture. By continuing to conduct this kind of research we can learn more about how novice nurses define and utilize intuition in their practice.

It is very important, due to the fact that this research validates the use of intuition by novice nurses, to conduct further research involving novice nurses. Both qualitative and quantitative studies will help to further clarify how intuition informs their practice and most importantly how intuition affects patient outcomes. It would also be particularly interesting to conduct this study again, using a similar methodology with novice nurses graduating with different levels of education, for example, graduates from a diploma and associate degree program, and compare the findings to this study involving baccalaureate graduates. By doing this, one may be able to identify if the level of education affects their intuitiveness. The level of education of these participants, being all baccalaureate level, may have contributed to the findings of this study. Additionally, again looking at novice nurses, doing a related study comparing those with a low self-perception of intuitiveness (as measured by the Miller Intuitiveness Instrument) with those in this study who had a high self-perception of intuitiveness would be interesting.

Another implication for future research is collaboration. The fields of adult education and nursing practice may want to collaborate on research to identify ways to
ease the transition from education (student) to practice (novice) as far as ways of knowing, nurse relationships, demands on novice nurses etc. One could also explore whether nursing schools and staff development programs across the United States are presently teaching or fostering other ways of knowing in their current curricula.

Further research needs to clarify the notion of “experience.” While Bastick (1982) first proposed the impact of experience on intuition, Benner (1982), Eraut (2000), and Miller (1995) all focused mainly on professional, on the job experience. This research clearly found that other non-work related experiences also affect intuitiveness. Therefore, future research needs to identify if there is one certain kind of experience that enhances or detracts from ones intuitiveness. Similarly, comparing novice nurses with job related experiences (nurses’ aid, extern, emergency medical technician or lab technician experience) with those nurses that do not have any job related experience could also prove to be interesting.

Future research using a sociological lens may help to examine the nurse-patient relationship and how this unique relationship impacts intuitiveness. These novice nurses talked specifically about “connecting on multiple levels” with their patients, therefore future research is needed on the nature of this relationship. Exploring the nurse-patient relationship from the perspective of the patient regarding the place of intuition in their care would also be intriguing and have implications for education as well as practice.

Lastly, future research may want to pick up the work of Epeneter (1998) with nursing professors and Kelly (1995) with staff development instructors to further investigate their attitudes towards and belief in intuition. Do they value it in their practice and teaching or are they somewhat controlled by the medical model of practice and
consequently fearful of stepping outside of the box of rationality? If the educators of nurses teach intuition, how do they accomplish this and where is it incorporated into their nursing curriculum? What are the practices that they incorporate into their own lives to foster their own intuitiveness?

The findings of continued studies on ways of knowing in nursing and higher education will contribute to the development of a learning theory that is inclusive of multiple ways of knowing. The development of such a theory would inform teaching practice and further studies on those students and novice practitioners taught by this theory will further define and clarify adult education theory. This reciprocal relationship between theory and practice will continue to drive future educational needs of our novice nursing practitioners.

Summary and Conclusions

This study sought to explore the meaning and use of intuition by novice registered nurses in their first year of practice and to gain insight into how the novice nurse accessed intuition in practice. This research wanted to identify if the novice nurse was exposed to intuition as a way of knowing in their nursing curriculum. This research is significant in that it moves the study of intuition into the realm of novice practice and moves beyond the limitations of cognitive, rational knowing to suggest the incorporation of holistic, multiple ways of knowing such as intuition and others outside of the rational domain.

This qualitative study utilized a Heideggarian interpretivist view of phenomenology where the assumptions of the researcher was not bracketed but shared openly with the participants as a way to establish rapport, seek further discussion and clarification of meaning. This research method proved to be appropriate for this purpose.
The qualitative approach allowed for rich data to be shared regarding personal and professional experiences. The interviews were a joy to conduct. Witnessing the participants happy, genuine enthusiasm for nursing brought back many memories to me of when I began my own nursing career.

The 16 participants were very articulate in describing what experiences both personal, and professional, helped to shape their meaning of intuition. They shared that intuitive mentors helped them to form their meaning of intuition as well as give them the approval to use intuition in their practice. They most frequently defined intuition as a “gut feeling” and noted several sources of intuition.

When accessing intuition, they told stories of the significance of developing self trust, as well as of trusting patients and other professionals that they worked with such as physicians and other nursing colleagues. The novice nurses repositioned themselves physically in space to better access intuition and “hear what was not being said” by their patients. The need to “connect” with their patients on multiple levels, as well as “connect” with past experiences in their lives also enhanced their intuitiveness. “Connecting” rational with nonrational ways of knowing was also found to be very important by these participants.

The outcomes of intuition in practice guided their nursing practice, informed their decision making and enhanced patient care. Intuition allowed the nurses to provide holistic care and see more than just the obvious. They were also able to navigate among professional relationships, and coordinate the involvement of other multidisciplinary team members.
Participant stories revealed that the culture of nursing education and nursing practice continue to reify the medical model. The participants clearly provided examples of getting mixed messages in nursing school and practice regarding accepted ways of knowing. As a result, fear was associated with relying on nonrational ways of knowing. The participants suggested a balance among intuition, science and other nonrational ways of knowing. Moreover, the participants shared how they appreciated hearing stories from professors in a learning environment that fostered respect and acceptance.

The results of this study informed cognitive learning theory as well as the Benner model of skill acquisition in nursing (1984) which were the theoretical frameworks for this study. This research is significant because it validates the use of intuition by novice nurses to inform their practice. Additionally, the novice nurses’ stories provided valuable information for both fields of adult education and nursing practice. In conclusion, this study provides new insights and expands our understanding of the complex phenomenon of intuition as a legitimate way of knowing in novice nursing practice and opens the door for further studies involving novice nurses.
Closing Thoughts

“It is quite plain that learning and teaching must start from some intuitive level.”

(Bruner & Clinchy, 1966, p. 71).

This research, just like learning and teaching began for me with an intuitive hunch. A hunch that informed me that novice nurses use intuition to guide their practice and inform their decision making. For me, it was an inner voice, a gut feeling, inner wisdom, that was rooted in my own experiences as a nurse and based on watching and listening to many of my nursing students in their practice. This study has impacted many areas of my life as a researcher, as a nurse, as a nursing educator, and as a person.

As the researcher, I felt very similar to how the participants in this study felt. I could empathize with them because they were embarking on their careers as a registered nurse, and I too, was embarking on my first qualitative research study. I wondered, just like they did, how dare I question what many experts say about this phenomenon of intuition in novice practice? As a novice researcher, based on the results of this study, I learned to listen to my inner feelings, listen to my heart and not to question myself, just like my mother and my grandmother tried to teach me as indicated in the beginning story of this dissertation. I learned they were RIGHT! Listen to your heart to balance and compliment your rationality. Furthermore as a nurse researcher, the results of this study encourage me to let intuitive hunches be the guiding force for further studies. Intuition is natural and so too is the naturalistic inquiry of qualitative research. This study has unfolded as the words and themes of the participants came to the fore naturally to explain the meaning of intuition in their lives and in their practice.
As a nurse, the results of this study will continue to impact the way I practice. I will continue to listen to that inner voice and realize that intuition isn’t mysterious or mystical but rather it has very practical implications as a tool for dealing with challenging situations that arise in the complex practice of nursing.

As a nursing educator, the results of this study will inform how I teach the future generations of nurses. Recognizing that we ALL are born with certain degrees of intuitiveness, but it is trained out of us, my students will continue to be recognized as individuals who have diverse ways of making meaning and learning. Knowing that intuition is teachable, my students will be encouraged to use multiple ways of knowing to complement and work alongside of rationality. The myth that there is one right way of knowing and diametrically opposing forms of knowledge will be spelled in my classroom.

As a person, the results of this study highlight the impact of intuition and the positive outcomes as a result of using intuition. Probably the most challenging for me, is to realize that I must take time to nurture my inner wisdom through relaxing, meditating, deep breathing, listening and focusing on being, rather than doing.

I end this dissertation with the high hope that future nursing educators and health care providers might take into account and recognize the valuable wisdom derived from both rational, as well as nonrational ways of knowing. It is my hope that they will then foster and encourage the implementation of these multiple ways of knowing in their teaching and practicing, in an effort to positively impact patient care.
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Appendix A: Interview Guide

Guiding Research Questions

The questions that will provide a focus for this study are:

1. Describe an individual that you (the novice nurse) believe to be intuitive or an individual that uses intuition in their practice.
2. How do you define intuition in the context of your practice?
3. To what extent do you utilize intuition in your life?
4. To what extent do you utilize intuition in your practice?
5. What channels do you utilize to gain intuitive information?
6. What are the patient-provider variables that enhance or detract from your ability to use intuition?
7. Are there any conditions under which you feel you have doubts regarding using intuition?
8. Are there any conditions under which you feel most confident in using your intuition?
9. What are the outcomes of following your intuitions?
10. Have you had any previous experiences in your life, that you feel allows you to be more intuitive (or less intuitive)?
11. What exposure have you had to intuition in your nursing education program?
12. What suggestions do you have for continuing professional education?
Appendix B: Hammond’s Cognitive Continuum Model


THE MILLER INTUITIVENESS INSTRUMENT (MII)

SELF-PERCEPTION OF INTUITIVENESS

© 1990 by Virginia G. Miller, RN, PhD, CS, FNP

DIRECTIONS: On the scale that follows each item, circle the number that best describes your perception of yourself in your professional role. Please circle a number. Do not mark between numbers.

FOR EXAMPLE:
In the clinical area, I use standard nursing diagnoses. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

1. I believe my intuitions about patients are true. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

2. I consider myself very skillful in my clinical practice. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

3. I recognize that I have “gut feelings” about clinical situations. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

4. My “gut feelings” about a clinical situation may determine my actions. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

5. I am likely to develop innovative approaches to nursing care problems. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

6. I am likely to use my innovative approaches to nursing care problems when traditional approaches are unsatisfactory. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

7. I will implement my innovative approaches in a clinical environment in which decision making about patient care is a democratic process, shared between the doctor and the nurse. 1 2 3 4 5 6
NEVER VERY INFREQUENTLY INFREQUENTLY SOMETIMES OFTEN NEARLY ALWAYS

(Please turn page over.)
8. I will implement my innovative approaches even in clinical environments in which the physician tends to be authoritative in decision making about patient care.

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9. My gut feeling about a clinical situation is at least as important as objective information in my decision making.

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10. I am in tune with my gut feelings about a clinical situation or patient at the same time I am performing technical procedures.

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11. Because of a "gut feeling", I may take certain nursing actions — those that directly affect the patient (such as initiating standing orders for medications or certain treatments) — that are contrary to objective data.

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12. I enjoy trying new ways of providing nursing care.

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13. I enjoy discussions of philosophical issues (such as moral/ethical issues, theories, abstract ideas.)

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14. I have had the sense of suddenly knowing something about a clinical situation or patient but of not knowing how I knew it.

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15. Discussions about ethical issues interest me.

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16. I am willing to act on my intuition in my nursing practice.

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</table>

17. I am in tune with what I sense about a clinical situation or patient at the same time I am performing technical procedures.

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<td>SOMETIMES</td>
<td>OFTEN</td>
<td>NEARLY ALWAYS</td>
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18. My first point of reference when I need help in decision making about a clinical situation is to reflect upon my gut feelings about it. 

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<td>INFREQUENTLY</td>
<td>SOMETIMES OFTEN</td>
<td>NEARLY ALWAYS</td>
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19. Discussions of esthetics (of the qualitative nature of things) stimulate my interest. 

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<td>SOMETIMES OFTEN</td>
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20. I know things about a patient or a clinical situation that I do not immediately know how I acquired. 

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<td>SOMETIMES OFTEN</td>
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21. What I sense about a clinical situation is at least as important as objective information in my decision making. 

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22. I trust my intuition when assessing a patient. 

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23. I trust my intuition when planning care for a patient. 

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24. I trust my intuition when providing care for a patient. 

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<td>SOMETIMES OFTEN</td>
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25. I tend to be non-traditional in my approach to problems which arise in providing nursing care. 

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26. When my gut feeling is that a patient's condition is deteriorating, despite objective data to the contrary, I believe the physician should be informed of my feelings. 

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<td>SOMETIMES OFTEN</td>
<td>NEARLY ALWAYS</td>
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</table>

27. When my gut feeling is that a patient's condition is deteriorating, despite objective data to the contrary, I will inform the physician of my feelings. 

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<td>SOMETIMES OFTEN</td>
<td>NEARLY ALWAYS</td>
<td>ALWAYS</td>
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</table>
28. When my gut feeling is that a patient’s condition is deteriorating despite ambiguous clinical evidence, I will inform the physician of my feelings.

29. I am aware of a special exchange of energy in the relationship between myself and some of my patients.

30. There are times when my gut feelings about a patient or clinical situation are more important than objective information in my decision making.

31. My first point of reference when I need help in decision making about a clinical situation is to reflect on what I sense about it.

32. In clinical situations, I have confidence in my intuition.

33. I believe that non-traditional forms of treatment (e.g., therapeutic touch, creative imagery, positive thinking) can be effective forms of health care.

34. I feel a “connection” between myself and some of my patients that is spiritual in nature.

35. I use my self to tune into my patient's feelings.

36. There are times when I sense about a clinical situation is more important than objective information.

37. I consider myself to be very intuitive in my professional role.
38. When uncertain about what action to take in a clinical situation, I rely on my "gut feeling" to help me determine the right thing to do.

1 2 3 4 5 6
NEVER  VERY FRE- QUENTLY  INFRE- QUENTLY  SOMETIMES  OFTEN  NEARLY  ALWAYS

39. Despite having limited objective information, I may have a sense of certainty about a clinical situation.

1 2 3 4 5 6
NEVER  VERY FRE- QUENTLY  INFRE- QUENTLY  SOMETIMES  OFTEN  NEARLY  ALWAYS

40. What I sense about a clinical situation may determine my actions.

1 2 3 4 5 6
NEVER  VERY FRE- QUENTLY  INFRE- QUENTLY  SOMETIMES  OFTEN  NEARLY  ALWAYS

41. I have had the experience in which everything "comes together" for me and I know exactly what to do.

1 2 3 4 5 6
NEVER  VERY FRE- QUENTLY  INFRE- QUENTLY  SOMETIMES  OFTEN  NEARLY  ALWAYS

42. There are some things I can do clinically better than many other nurses.

1 2 3 4 5 6
NEVER  VERY FRE- QUENTLY  INFRE- QUENTLY  SOMETIMES  OFTEN  NEARLY  ALWAYS

43. On this scale please circle the number that corresponds to how intensive you consider yourself to be:
(1=not intensive at all; 6=very intensive)

1 2 3 4 5 6

[Please be sure you have marked items on BOTH the front AND back of each page. Thank you.]

Comments:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
## Appendix D. Historical Development of the Concept of Intuition

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Proponent</th>
<th>Definition of Intuition</th>
<th>Source of Intuition</th>
<th>Intuition as a Valued Way of Knowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancient Views</td>
<td>*Oracle of Delphi</td>
<td>Visions or Insights regarding predictions about the past, present or future.</td>
<td>Derived from the Gods via a seer or oracle</td>
<td>Functions of greatest importance.</td>
</tr>
<tr>
<td></td>
<td>Greeks (Athenian general Nicias) and Romans (Cicero-106-143BC- Roman Statesman, orator &amp; philosopher)</td>
<td>Special and superseded rational conclusions</td>
<td>Dreams Oracles Prophets Divination from the natural world</td>
<td>Intuitive knowledge is valid. Not only because of the possibility of helping with life issues but also because of the connection it provides with the spiritual and non material world.</td>
</tr>
<tr>
<td></td>
<td>Socrates 470-399 BC)</td>
<td>Nonrational</td>
<td>Spiritual. Derived from the soul</td>
<td>Combined intuition with scientific knowledge</td>
</tr>
<tr>
<td></td>
<td>Plato (427c.- 347 BC)</td>
<td>Nonrational</td>
<td>He himself was unclear as to the source of intuition Implanted in the soul</td>
<td>Intuition is reliable source of knowledge. Lower order of thinking. The Philosophical School of Idealism flowed from Plato.</td>
</tr>
<tr>
<td></td>
<td>Aristotle (384-322 B.C.)</td>
<td>Intuitive reasoning—“knowledge that exists without proof”</td>
<td>Sensory perception &amp; memory. Mental act that makes knowledge possible.</td>
<td>Truths are intuitively known. Intuition ranks above universals of science.</td>
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<tr>
<td>Greek Cynics</td>
<td></td>
<td>Is always true. Leap of understanding</td>
<td>Will power. Each man has an innate instinctive sense</td>
<td>Knowledge regarding the morally good is directly apprehended by intuition. Linked intuition to ethics.</td>
</tr>
<tr>
<td>(Classical period 1750-1830)</td>
<td></td>
<td>“Intuitionism” Concerned with morality &amp; ethics</td>
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<tr>
<td>Epicurus 341-270 BC</td>
<td></td>
<td>Epicurianism</td>
<td>Man has more than the 5 senses such as “anticipations” which give us knowledge on how to handle life experiences</td>
<td>Goal of man should be serenity of mind</td>
</tr>
<tr>
<td>Middle Ages</td>
<td>Saint Augustine AD354-430</td>
<td>Nonrational</td>
<td>Inspiration Spiritual Revelation Product of contemplation</td>
<td>Yes</td>
</tr>
<tr>
<td>(460 AD-1450)</td>
<td>Saint Thomas Aquinas (1225-74, Italian theologian, philosopher, called the Angelic Doctor)</td>
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<td>William of Ockham (1285-1349, English philosopher)</td>
<td>Proposed a system of types of cognition: Intuitive cognition-immediate contact with objects. Abstractive cognition ability to</td>
<td>Man carries out God’ will when he intuits. Cognitive but may also originate from God.</td>
<td>Yes</td>
</tr>
<tr>
<td>Era</td>
<td>Figure</td>
<td>Method of Knowledge</td>
<td>Source of Knowledge</td>
<td>Result</td>
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<tr>
<td>Renaissance to the Eighteenth Century</td>
<td>Rene Descartes (1596-1650, French Philosopher)</td>
<td>Rational Intuition</td>
<td>God’s knowledge Or from the soul.</td>
<td>Two ways of acquiring true knowledge; deduction &amp; intuition</td>
</tr>
<tr>
<td></td>
<td>Blaise Pascal (1623-1662) French mathematician, physicist &amp; philosopher</td>
<td>Everyday knowledge had to be based on experience, custom, emotions and experience</td>
<td>Sociocultural</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Baruch Spinoza (1632-1677) Dutch Philosopher</td>
<td>Category in a tripartite division of knowledge Intuition Apprehension (Opinion) Rational thought</td>
<td>God’s knowledge</td>
<td>Beyond the grasp of systematic rational knowledge &amp; yet is very real.</td>
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<td>David Hume (1711-1776)</td>
<td>Intuitive feeling</td>
<td>Human morality</td>
<td>Influenced Kant</td>
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<tr>
<td></td>
<td>Emmanuel Kant (1724-1804, German Philosopher)</td>
<td>Nonrational recognition and awareness of individual entities Two forms of pure sensible intuition: Space (Raum) Time (Zeit)</td>
<td>Sensual perception (Sinnlichkeit)</td>
<td>Linked sensibility with understanding (Verstand). Intuition yields truth.</td>
</tr>
<tr>
<td></td>
<td>Jean Jacques Rousseau (1712-1778)</td>
<td>Innate human ability with which humans were born</td>
<td>Natural virtues</td>
<td>Notion that a child is naturally good.</td>
</tr>
</tbody>
</table>
| **The Nineteenth Century** | **Friederich Schleiermacher** (1768-1834, Prussian Theologian) | **Recognized 4 types of intuitive wisdom:**  
- Self Intuition  
- Intuition of the world (Religion)  
- Aesthetic intuition  
- Philosophical Speculation | **All wisdom comes from God** | **Valid way of linking perception, religious experiences and intuition which formed an interdisciplinary definition.** |
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<tr>
<td><strong>Vincenzo Gioberti</strong> (1801-1852)</td>
<td><strong>Knowledge is basically intuitive &amp; that in intuition the subject apprehended the object immediately</strong></td>
<td><strong>The object itself presented to the mind an idea, which was then intuited.</strong></td>
<td><strong>Yes</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Jesuit Serafino Sordi</strong> (1793-1865)</td>
<td><strong>Human ideas are in reality ideas existing only in the divine mind. Intuition is an act performed either by the subject or the object</strong></td>
<td><strong>Divine Intuition implies an image of the intuiters mind.</strong></td>
<td><strong>Yes</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Arthur Schopenhauer</strong> (German philosopher, 1788-1860)</td>
<td><strong>Immediate knowledge</strong></td>
<td><strong>Human mind directed by the Will</strong></td>
<td><strong>Yes for it linked intuition and the Will, motivation and the individuals quest for meaning.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>F. W. Froebel</strong> (Educational Philosopher, 1782-1852, best known for the kindergarten movement)</td>
<td><strong>Basic truths taught through the use of symbols to link the learner with reality</strong></td>
<td><strong>Physical context as the stimulator for intuition</strong></td>
<td><strong>Advocated for a flexible curriculum to include intuition. Max Wertheimer</strong></td>
<td></td>
</tr>
</tbody>
</table>
Henri Bergson (1859-1941, French Philosopher) | Intuition precedes intellect and is used to gain a deeper understanding of reality, which can not be obtained through analyzing. | Only through feeling can a person, object, or situation be intuitively perceived as a real truth. | Acquired intuitions develop after a long acquaintance.

Twentieth Century | Edmund Husserl (1859-1938, Phenomenologist) | Source of Authority | Primordial, Experiential knowing | Raised the status of intuition to be equal with other sources of knowledge.

Bertrand Lord Russell (1872-1970) | Logical intuition. Our immediate knowledge of truth. Self evident truths Two sorts of Knowledge: Knowledge of things Knowledge of truths | Unified, holistic Knowledge by Acquaintance a form of prelinguistic knowledge of concepts | Three stages of acquiring knowledge: Romance-Intuitive mode Precision Generalization Yes

Max Wertheimer Viennese Psychologist (1880-1943) *BOOK: Productive Thinking* | Gestaltist psychology is a unified psychological, physical or symbolic configuration has properties that can not be derived from its parts. | Perception through the unconscious. Recognized subjective experience and emotion in thought process | First modern psychologist to publicize the significance of intuition.
<table>
<thead>
<tr>
<th>Name</th>
<th>BOOK: <em>The Process of Education</em></th>
<th>Does not come from analytic apparatus</th>
<th>Sense of rightness “courageous taste” to be able to stand up for what one believes in.</th>
<th>Recognized that many of the past scientific breakthroughs were the result of intuitive insights and urges student to guess.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Buckminster Fuller (1895-1983)</td>
<td>Principle tool of humankind, a positive force that may benefit individuals and society as a whole</td>
<td>Spiritual Source of truth</td>
<td>Stated that intuitions contribute to future conceptual and technological advances</td>
<td></td>
</tr>
<tr>
<td>Berne, E. American psychiatrist</td>
<td>Unconscious source of knowledge “Clinical intuition” is objective and concrete. “Intuitive Mode”</td>
<td>Knowledge based on experience &amp; acquired through the senses, which the intuiter is not able to articulate. States that intuition consists of 2 processes: Subconscious perception &amp; conscious verbalization of the perception</td>
<td>Wrote a book entitled <em>Intuition and Ego States</em> (1977) Concerned with the feelings of the intuiter</td>
<td></td>
</tr>
<tr>
<td>C. G. Jung (1875-1961)</td>
<td>Unconscious Function that transmits perceptions.</td>
<td>Unconscious 2 Forms: Subjective and Objective Coming from the will A personality type.</td>
<td>Holistic application in many fields. Nonrational function. Jung was also concerned about intuition in other cultures.</td>
<td></td>
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<tr>
<td>Author</td>
<td>Year</td>
<td>Description</td>
<td>Source</td>
<td>Notes</td>
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<tr>
<td>Benner, P.</td>
<td>1982</td>
<td>Perceptual awareness</td>
<td></td>
<td>Based on experience</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Much nursing research uses this information</td>
</tr>
<tr>
<td>Rew, L.</td>
<td>1982</td>
<td>Knowledge of fact or truth that is independent of the linear reasoning process.</td>
<td>Innate Knowledge.</td>
<td>Spirituality</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>Much of research today includes the information identified by Rew</td>
</tr>
<tr>
<td>Miller</td>
<td>1990</td>
<td>Immediate sense of knowing</td>
<td>Basic knowledge linked with past experiences</td>
<td>Yes</td>
</tr>
<tr>
<td>Schulz, M. L.</td>
<td>1988</td>
<td>Is a sense (seeing, hearing, or feeling) that all individuals have.</td>
<td>Innate and based on emotions</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Appendix E  Consent Form

THE MEANING OF INTUITION TO REGISTERED NURSES (IRB #15967)

Purpose of the study
The purpose of this study is to examine the meaning of intuition to registered nurses.

What you will be asked to do and approximately how long it takes
You will be asked to participate in 2 interviews at a location and time convenient to you. The first interview may last up to 2 hours and the second interview will last up to 1 hour.

Study Supervisors and Contact Information
The principal investigator is Lisa Ruth-Sahd, RN, D. ED ©, C.E.N., C.C.R.N. who is completing this dissertation research as part of her doctoral studies at Penn State University. You may contact Lisa Ruth-Sahd at any time should you have any questions regarding this study. (717) 285-2904, LSAHD961@earthlink.net. or 430 N. Lime Street Lancaster, PA 17602.

Dr. Elizabeth Tisdell is the dissertation advisor. You may contact the advisor at (717) 948-6640, ejt11@PSU.EDU or 777W. Harrisburg Pike, Middletown, PA 17057-4898. Additionally, you may call the Office for Research Protections at Pennsylvania State University at (814) 865-1775.

All Information will be Kept Confidential
Please know that ALL information will be kept strictly confidential. Confidentiality will be assured by not using the real names of the participants and keeping the audiotapes secured in a locked filing cabinet. No one will have access to the tapes other than the researcher. The tapes will be destroyed 10 years after the study is completed.

Please know that participation is voluntary and that you may withdrawal from the study at any time. You may also decline to answer specific questions. You must be 18 years of age or older in order to participate.

PLEASE RETURN THIS COPY TO THE INVESTIGATOR
**Participant Risks**

There should be no risks or discomforts associated with participating in this study. However, if any of the questions do cause discomfort you may withdraw from the study at any time.

**Participant Benefits**

By participating in this study you are adding to the body of knowledge that exists on intuition in the field of nursing practice. This information will help to guide nursing education and will enhance patient care.

**How to participate in the present study**

This study will take place over September, October and November of 2003. You may consent to participate in this study by agreeing to be interviewed. This will take approximately 90 minutes. Approximately two to three weeks after this interview, a second follow up interview will take place. The second interview will last approximately one hour. The purpose of the second interview is to clarify any issues from the first interview and gather any additional information that you would like to share since the first interview.

**Study results**

A copy of the study results will be made available to you if you would like them.

**Thank you**

I realize that your time is valuable, I appreciate the time, energy, and information that you have shared with me. Thank you so very much.

I agree to participate in this study investigating the Meaning of Intuition to Registered Nurses. The study has been described to me. All questions have been answered, if I should have any additional questions, I may call the principal investigator (Lisa Ruth-Sahd of Penn State Harrisburg Campus at (717) 285-2904 or email LSAHD961@earthlink.net. I understand that no rewards are given for participation, but that I may have a copy of the study results. I understand that I may withdrawal from the study at any time and all information will be kept confidential.

______________________________                 __________________________
Participant Signature                                                     Date

______________________________                ___________________________
Investigator Signature                                                     Date

If you would like to receive a copy of the study results please provide either your email address or postal address. Thank you.
**Figure 1** Nursing Gestalt

VITA

LISA ANNE RUTH-SAHD

**Education**
Pennsylvania State University, D. Ed., Adult Education, 2004
Villanova University, 1988, Master of Science in Nursing (MSN) Nursing Education
York College of Pennsylvania, 1983, Bachelor of Science (B.S.N.), Nursing

**Professional Experience**
Nursing Instructor of Advanced Medical-Surgical Nursing, Lancaster Institute for Health Education
Registered Nurse in Emergency Department and Critical Care Units with certifications in Critical Care Nursing and Emergency Nursing
Lebowitz & Mzhen, Attorney of Law Firm ~ Expert witness
Nursing Instructor of Advanced Medical-Surgical Nursing, York College of Pennsylvania
Instructor, American Healthcare Institute
Instructor, American Nursing Review

**Professional Affiliations**
- Sigma Theta Tau, Xi Chi Chapter, Millersville University
- American Association of Critical Care Nurses
- Emergency Nurses Association

**Honors and Awards**
- Received the 2002 Outstanding Graduate Student Award in Adult Education ~ Penn State University
- Received the 1999 Nightingale of Pennsylvania Award for Nursing Education
- Isaac G. Weidman Award (for clinical excellence) 1986 - Awarded by the Isaac G. Weidman Foundation by Lancaster General Hospital

**Presentations (Related to Intuition only)**

**Publications (Related to Intuition only)**