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Exploring the Perception and Judgment of Senior
Baccalaureate Student Nurses in Clinical
Decision-Making From a Nursing Theoretical Perspective

A Dissertation
Presented for the
Doctor of Philosophy Degree
THE UNIVERSITY OF TENNESSEE, KNOXVILLE

Ella Mae Brooks

August 1995

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DEDICATION

This dissertation is dedicated to my family. Its achievement has been for them as much as it has been for myself. First and foremost, this is dedicated to my husband, Dan Brooks, for his love, encouragement, strength and support throughout each step of my professional growth. His unfailing belief in me served to strengthen and reaffirm my confidence which helped me begin and complete this endeavor.

Also this is dedicated to my sisters, Carol Doerkson and Joyce Gerhart; to my twin brother Ron Stradinger; and to each of their spouses. Their timely encouragement, prayers, and support helped me cross many hurdles.

Additionally this is dedicated to my "namesake" Aunt Ella and Uncle Albert Bachman, with whom I have shared a special bond for as long as I can remember.

And especially to my mother, Lydia Stradinger, for her quiet strength and always "being there." And to my father, the late Otto Stradinger, who died in my first semester of this endeavor. His final words to me helped me overcome what often seemed insurmountable odds: **Never settle for less if you can be more.**

ACKNOWLEDGMENTS

I am particularly grateful to my dissertation committee who have exemplified the *whole-person* approach in their guidance and support throughout this process. Their willingness to look at new ideas and understand the *whole-person* has made this endeavor worthwhile. I have also benefited greatly from the expertise of each one as individuals. Dr. Sandra Thomas, for her incredible energy, for generously sharing her time, vast knowledge, experience and expertise in both research and education. Dr. Pat Droppleman, for her knowledge of nursing, teaching, and students. Dr. Mary Lue Jolly, for her knowledge of translating theory into practice and freely sharing her time. Dr. Tricia McClam for her educational and decision-making expertise. Dr. Norma Mertz, for her educational leadership which has helped me integrate ideas and has given new meanings to *Teacher* and *Teaching*.

A special thanks to Dr. Ken Phillips for his friendship, encouragement, and assistance; for helping me conceptually clarify *whole-person experience*; for critiquing new ideas (and old ones); and, most of all, for helping me make it *through* the finish line.

Thanks to those who served as reviewers for the protocol: Kathleen Conlon, MSN, RN; Steven Krau, PhD, RN; Johnnie Mazingo, PhD, RN; Ken Phillips, PhD, RN; Lynn Qualls, BSN, RN, CCRN; and Dava Shoffner, PhD, RN, CS.

A very special thanks to Tina Bentrup, Kathleen Bailey, and LuAnn Blocker, from Hodges Interlibrary Services, for their excellent and speedy service in "obtaining the unobtainable."

Thanks to those who facilitated my access to research sites: Katie Lamb, Dr. Ann Harley, Dr. Pamela Holder, and Janet Secrest. Special thanks to Janet for sharing her home and time during completion of this process.

I also acknowledge additional faculty who have contributed their time at various stages of this process: Dr. Martha Alligood, Dr. Mildred Fenske, and Dr. Inez Tuck.

A special thanks to fellow doctoral students. Their friendship and sharing have been both support and encouragement throughout this process.

Sincere appreciation to those students who volunteered to participate in this study.

Thanks to *Kappa Rho Chapter of Sigma Theta Tau* for providing funding for this study.

Finally, I am grateful to my husband, Dan, whose love and support has made it possible for me to complete this endeavor.

ABSTRACT

This study focused on theoretical clarification of Brooks' Theory of Intrapersonal Perceptual Awareness (BTIPA), a newly developed mid-range theory from Imogene King's (1981) Interacting Systems Framework. BTIPA provides a wholistic approach to clinical decision-making. The central premise of BTIPA asserts that the nurse, as a whole person (perceiving, judging, intuiting, sensing, thinking and feeling) makes decisions. This study had two purposes: (a) to clarify BTIPA by identifying and classifying intrapersonal factors which are integral to decision-making in baccalaureate student nurses, and (b) to extend King's work, through BTIPA, by explicating the concepts of perception, judgment and decision-making in the personal system.

One research question addressed the central premise. In a descriptive-exploratory design, with structured interview and theoretically derived, open-ended questions, 18 senior baccalaureate students were interviewed and audiotaped. A coding scheme, developed from the theoretical definitions, was used in content

analysis to systematically analyze each verbatim transcript.

The findings supported the central premise and clarified the interaction of perception (sensory and intuitive) and judgment (cognitive and affective) as whole-person (intrapersonal perceptual awareness) decision-making processes of self. Self emerged as the core concept to intrapersonal perceptual awareness. The researcher concluded that it is actually the interaction of the intrapersonal characteristics of self through which whole-person decision-making occurs. The findings were used to reconceptualize BTIPA as a whole-person process. Because perception and judgment occurred interactively through self, the findings did not support bringing the concepts (perception, judgment and decision-making), as separate concepts, into King's personal system, as originally proposed in BTIPA. Instead, the researcher concluded that self and person are the same, and the findings are used to demonstrate a recommended reconceptualization of King's personal system as self, the whole person. In reconceptualization, perception and judgment could be brought into the personal system through self. The

findings did not support bringing decision-making, as originally proposed, into the personal system because intrapersonal and interpersonal decisions (from which the BTIPA decision was derived) were not the same.

BTIPA has implications for developing a wholistic approach in teaching decision-making, viewing students wholistically, curriculum development, and understanding intrapersonal processes for socialization of professional nurse values.

PREFACE

"Change has become a way of life. . . . The development of a theory of nursing. . . offers the knowledge needed to build change into a system of nursing education. . . .

The arduous task ahead rests with those individuals who have the courage to embark on a safari to a wilderness of ideas. The journey will result in many explorations of man and his environment, in health and in illness. The roads will not be insurmountable. The return will bring a theory of nursing which will find its way into the world of reality - the practice of professional nursing."

Imogene King

(1964). Nursing Theory - Problems and Prospect. Nursing Science, 2, 394-403

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CHAPTER I

Theoretical Development

Introduction

Over the years clinical decision-making has become critical to professional nurses (e.g., Aspinall, 1979; Benner, 1983; Conger, 1994; Corcoran-Perry, & Bungert, 1992; Hammond, 1964; Hughes & Young, 1992; Kelly, 1964; Tanner, 1986). How to teach students to make perceptive clinical decisions has been and continues to be a central concern for nurse educators in preparing student nurses for professional nursing practice (Casebeer, 1991; Conger, 1994; Tanner, 1986; Tanner, 1989). Nurse educators have an increasingly vital role in this area as professional nursing moves into the twenty-first century.

As the impact of health care reform shifts the focus of nursing practice from hospitals and institutions to managed care and community-based settings (Moccia, 1993; National League for Nursing, 1991; O'Grady, 1994; Tanner, 1993; Tanner, 1995), educators will have an even greater responsibility to provide students with a firm foundation to become expert decision makers in the changing health care

arena. Moccia (1993), representing the national nurses' accrediting body, the National League for Nursing, says there is a need for the "macro" rather than the "micro" approach to decision-making. This means that a nurse must be prepared to understand the client in the community, in the home, in the school, or other pertinent setting.

Likewise, students must have the ability to view a nurse-client situation as a whole. Consequently, students need to be taught wholistically (e.g., focusing on wholes), rather than particularistically (e.g., focusing on parts such as pathophysiological events), in order to make effective clinical decisions in the changing health care arena. To achieve this objective nurse educators must shift their foci from narrow, particularistic approaches to wholistic approaches which are applicable in a variety of settings or situations.

The *wholistic* view being presented in this study uses the perspective and spelling of *wholism* that is consistent with the Gestalt view (e.g., Allport, 1955). In the Gestalt approach, one views a situation, or a *whole*, as more than the sum of its parts (Allport,

1955), as "it is not sufficient to study isolated parts and processes" (Bertalanffy, 1975, p.6) to understand the interaction of the whole. This means that nurses must look beyond particulars, such as the pathophysiological events in a nurse-client situation, to the whole nurse-client situation in which the pathophysiological event may be only one micro aspect of the whole.

Typically, clinical decision-making is taught by using nursing process in a linear structured manner (Aspinall & Tanner, 1981; Casebeer, 1991; Harbison, 1991; Holbert & Abraham, 1988; Hughes & Young, 1992; Oermann, 1991; Tanner, 1986; Tanner, 1989) which is particularistic, micro or situationally focused, and primarily limited to rational, concrete, sensory information. By limiting information to particulars, nursing process fails to allow for the *intrapersonal* (e.g., emotions, perceptions, thoughts, beliefs) processes which the whole person brings to the situation, and it may force "nursing's perspective from holism [sic] to an unduly mechanistic approach to care" (McMurray, 1989). As Hughes and Young (1992) pointed out, "most nursing programs teach the nursing process,

[but] few teach students how to make decisions within that framework" (p. 16).

The nursing process may be viewed as a guide which depicts the steps (assessment, planning, implementation, and evaluation) involved in taking clinical actions in planning a client's care. Although nursing process has been used for several decades, "there is no empirical evidence as to its effectiveness" (Tanner, 1986, p. 3). With this approach, students develop a plan of care for their clients which supposedly reflects the total intrapersonal processes involved in obtaining information and making decisions in clinical situations. However, the framework is essentially atheoretical and thus open to incongruent interpretation from one educator to another. The lack of congruency in teaching decision-making within the nursing process may result in a weak intrapersonal decision base and may ultimately contribute to indecisiveness and lack of confidence in new graduates.

Information processing theory and decision theory have been the two primary theoretical perspectives used in studies pertaining to clinical decision-making in

nursing (LeBreck, 1989; Tanner, 1986). Generally these studies can be viewed in three categories: those that focus on information processing or decision theory (e.g., Corcoran, 1986a; del Bueno, 1990; Hughes & Young, 1992; Westfall, Tanner, Putzier, & Padrick, 1986); those that focus phenomenologically on intuition (e.g., Benner, 1984; Booher, 1992; Gerrity, 1987; Minick, 1992; Rew, 1988; Rew, 1990); and those that focus on sensory-analytical or diagnostic reasoning (e.g., Radwin, 1990; Tanner, Padrick, Westfall, & Putzier, 1987; Thiele, Baldwin, Hyde, Sloan, & Strandquist, 1986).

Decision theory, information processing theory and diagnostic reasoning are prescriptive and concerned with how nurses *should* make a decision, rather than how a decision is made (Tanner, 1989; Wurzbach, 1991). In other words, prescriptive decision-making tends to mechanize the process of decision-making and fails to provide for the intrapersonal process, such as the perceptions, thoughts, feelings, emotions, and biases inherent within each decision a person makes. Some qualitative studies of intuition (e.g., Agan, 1987; Benner, 1984; Booher, 1992; Rew, 1988; Rew 1990) focus

on some of the human aspects involved in decision-making but do not address the whole intrapersonal decision process.

Moreover, there are no studies which have addressed the relationship of perception and judgment in clinical decision-making as an intrapersonal process. Furthermore, and more importantly, none of the studies have approached clinical decision-making from a nursing theoretical framework. Particularistic approaches (e.g., information processing theory and diagnostic reasoning) narrow the decision approach. Moccia (1993) asserts the need to change to a broad decision approach to keep up with the changing health care arena and, since previous approaches have not provided for a broad preparation in this process, a wholistic, intrapersonal nursing theoretical approach is warranted. Therefore, this study proposed a theory of intrapersonal decision-making, Brooks' Theory of Intrapersonal Perceptual Awareness, as a wholistic educational approach to clinical decision-making.

Purpose of the Study

This study explores perception and judgment in clinical decision-making from a nursing theoretical

perspective. This perspective is the newly developed mid-range theory, Brooks' Theory of Intrapersonal Perceptual Awareness, derived, by this researcher, from Imogene King's (1971; 1981) Interacting Systems Framework. Brooks' Theory of Intrapersonal Perceptual Awareness proposes that perception and judgment interact in the clinical decision-making process.

Theories are tentative in nature, representing plausible explanations for some phenomenon, and need to be explored and tested through research by methods which are appropriate for the type of theory (e.g., descriptive, explanatory, or predictive) being scrutinized (Chinn & Kramer, 1991; Fawcett & Downs, 1992). Fawcett and Downs (1992) encourage researchers to clarify theoretical explanations of newly developed theories, rather than rushing into correlational or experimental designs. Hence, this study had two purposes.

The first purpose was to clarify, at a descriptive level, Brooks' Theory of Intrapersonal Perceptual Awareness by identifying and classifying intrapersonal factors which are integral to decision-making by senior baccalaureate student nurses. The second purpose was

to contribute to nursing's knowledge base by extending Imogene King's (1971; 1981) work, through development of Brooks' Theory of Intrapersonal Perceptual Awareness, and by explicating the concepts of perception, judgment, and decision-making within the Personal System. King alluded to these ideas but did not develop them in her Interacting Systems Framework.

Conceptual Framework

Imogene King's (1971, 1981) Interacting Systems is the conceptual framework, from which Brooks' Theory of Intrapersonal Perceptual Awareness, used for this study, was derived. In King's Interacting Systems Framework (1981), King sets forth three systems of communication: personal, interpersonal, and social, with concepts unique to each system (refer to Figure 1). The personal system pertains to individuals; the interpersonal system pertains to two or more individuals; and the social system pertains to institutions and organizations (King, 1971, 1981, 1986, 1990; 1992). These systems interact through communication. This means that information, verbal or

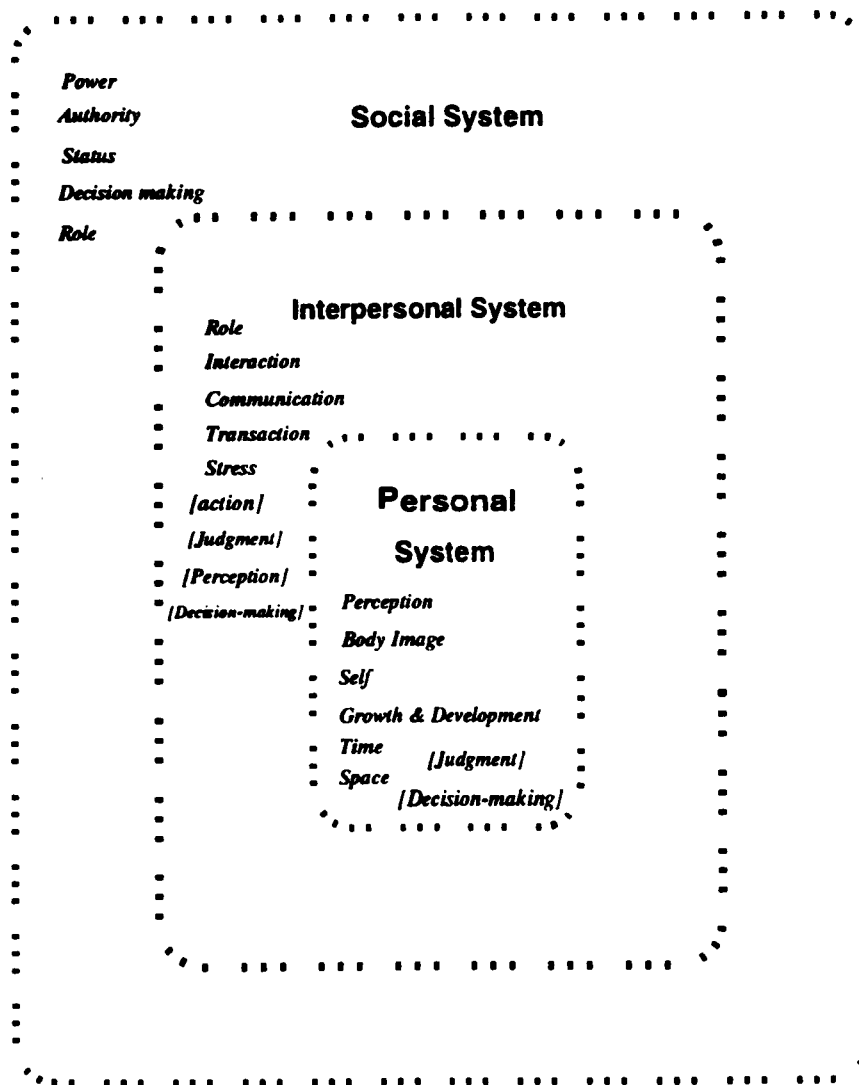


Figure 1. The figure depicts three interacting systems and their concepts. Bracketed concepts are implicit in King's work and are explicated in this study. This diagram is modified from King (1981, p. 11).

nonverbal, is exchanged (perceived, judged, decided, acted, and reacted upon) within, between, and among persons in systems.

The focus of this study is on the personal system. Specifically, it focuses on the student nurse as a personal system. According to King, each individual person is viewed as a personal system which means "that the nurse as a person is a total system and the patient as a person is a total system" (1981, p. 10); thus, the student nurse is an individual, whole, personal system. Since the systems are interacting, the concepts, within each system, are not exclusive to one system but are relevant among the systems.

King (1981) discussed the influence of perception, judgment, and actions on each other as they precede interaction in the interpersonal system's process of interactions between nurses and their clients (see Figure 2). Within King's (1981) Interacting Systems Framework, perception, judgment, and action are integral to nurse-client interactions, and King clearly explicates perception as a core concept; however, King fails to identify judgment and action as core concepts (see bracketed concepts in Figure 1).

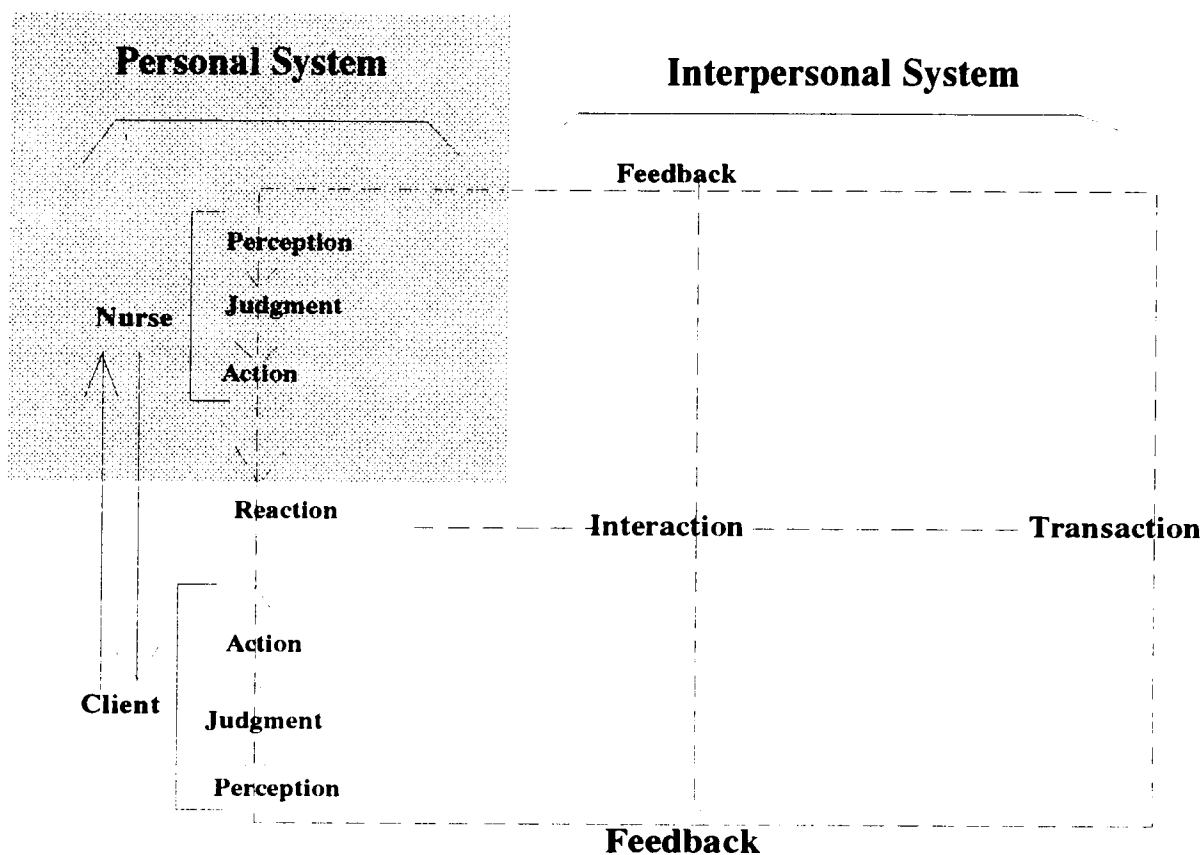


Figure 2. This figure depicts how perception, judgment, and action precede interaction in a nurse-client interaction. The shaded area represents the focus of this study which is the student nurse's intrapersonal perceptual awareness. This figure is modified from King (1981, p. 61).

Although, perception, judgment and action are discussed by King (1981) within the interpersonal system, and decision-making is explained in the social system, these concepts are also relevant to the personal system because of the underlying role of communication through which the systems interact as a whole (see systems' concepts in Figure 1).

Communication is explicated by King (1981) as a core concept in the interpersonal system (see Figure 1) and, within this system, King describes two types of communication: intrapersonal (within the person) and interpersonal (between persons such as nurse and client). King (1981) stated that perception, judgment and action cannot be directly observed, and we can only make inferences about them; that is, *intrapersonal* communication. Once behaviors are observed, either verbally or nonverbally, interaction occurs; that is, *interpersonal* communication. Thus if perception, judgment, and action, precede interaction and cannot be observed, then one can infer that there is an *intrapersonal* decision process, preceding action, which occurs in the personal system. King only alluded to this intrapersonal decision process. In order to

clearly delineate perception and judgment in the personal system, Brooks' decision-making Theory of Intrapersonal Perceptual Awareness has been derived from King's Interacting Systems Framework.

Theoretical Framework

Brooks' Theory of Intrapersonal Perceptual Awareness

The theoretical framework which guides this study is Brooks' Theory of Intrapersonal Perceptual Awareness derived from King's (1971; 1981) Interacting Systems Framework. Brooks' Theory of Intrapersonal Perceptual Awareness (BTIPA) is a decision-making theory that proposes a personal system explanation of perception and judgment in clinical situations. BTIPA encompasses all of King's (1981) personal system concepts (perception, self, body image, growth and development, time and space) and additionally integrates judgment and decision-making. Although perception, judgment and decision-making are the central concepts within the BTIPA, the personal system concepts are also important and are assumed in the theory as follows. Body image is viewed as a dimension of self. Self is the dynamic whole person which is integral to perceptual awareness and decision-making. Perceptual awareness is impacted

by, but not limited to, growth and development (e.g., personal, physiological, educational, experiential, etc.) of self over time. Perceptual awareness occurs within the boundaries of space and time.

The central premise for Brooks' Theory of Intrapersonal Perceptual Awareness is that the nurse is a whole person, and as a whole, moves into every clinical situation. This means that, within each situation, it is the whole person--that is, *everything that nurse is intrapersonally, as a perceiving, judging, sensing, intuiting, thinking, feeling, believing, valuing person--who makes the decision.*

Intrapersonal Perceptual Awareness was derived from King's (1971, 1981) discussion of nursing process, as an interpersonal process of communication between nurse and client, and King's use of the concepts of perception and judgment in regard to awareness of situations and events which affect nursing actions. Although King talks about nursing process as an interpersonal process, her ideas have implications in the personal system because "each individual person is a personal system" (1981, p. 10), and the *intrapersonal* communication affects the nurse in process (refer to

Figure 3). King defined nursing as "perceiving, thinking, relating, judging, and acting vis-a`-vis the behavior of individuals who come to a nursing situation" (1981, p. 2). Therefore, this aspect of nursing process can actually be viewed as an intrapersonal phenomenon, occurring within the personal system, which is why BTIPA is a personal system theory. Intrapersonal phenomena are important because the nurse's decisions impact the client and client outcomes, and therefore this theory (BTIPA) provides a means, within nursing process, to focus on the nurse in clinical situations.

In other words, intrapersonal perceptual awareness describes how individuals learn to make decisions, how nurses practice decision-making, and how educators can teach students to make decisions, "because the ways in which teachers guide students through a learning experience are reflected in the way students guide their patients" (King, 1971, pp. 38-39). This means, as we prepare students for *interpersonal* processes in nurse-client situations, we also form the knowledge base and development of their individual *intrapersonal*

Interpersonal Perceptual Awareness Viewed
Within Nursing Process Framework

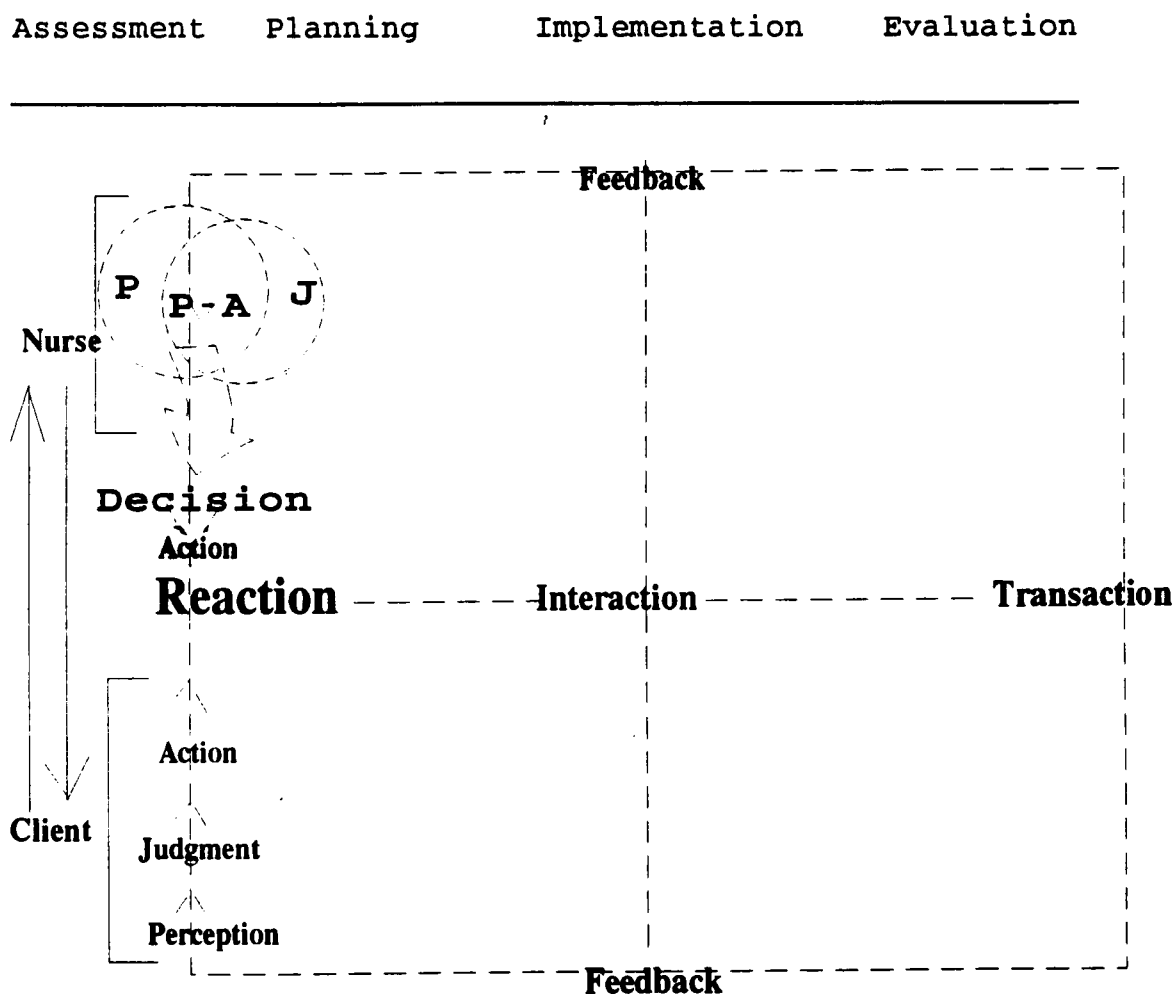


Figure 3. This figure depicts how Brooks' Theory of Intrapersonal Perceptual Awareness is viewed within the nursing process framework.

decision-making processes in the same situations.

Intrapersonal perceptual awareness is a decision-making process in which perception and judgment occur together within the person.

Within BTIPA, perception and judgment are further delineated: perception is proposed to involve two types of processes: sensory and intuitive; and judgment is proposed to involve two types of processes: cognitive and affective. Hence, intrapersonal perceptual awareness is the interaction of perception and judgment and actually involves sensory perception, intuitive perception, cognitive judgment, and affective judgment, which together form clinical decisions (refer to Figure 4).

This means that when a nurse is in a situation: the perception (sensory and intuitive) of the event is important; the judgment (cognitive and affective) about the event is important; and additionally, BTIPA proposes that a third factor, perceptual awareness, is also important. That is, perception and judgment work together and increase a nurse's state of awareness about what is occurring in the situation. Thus, perceptual awareness is proposed to be more specific

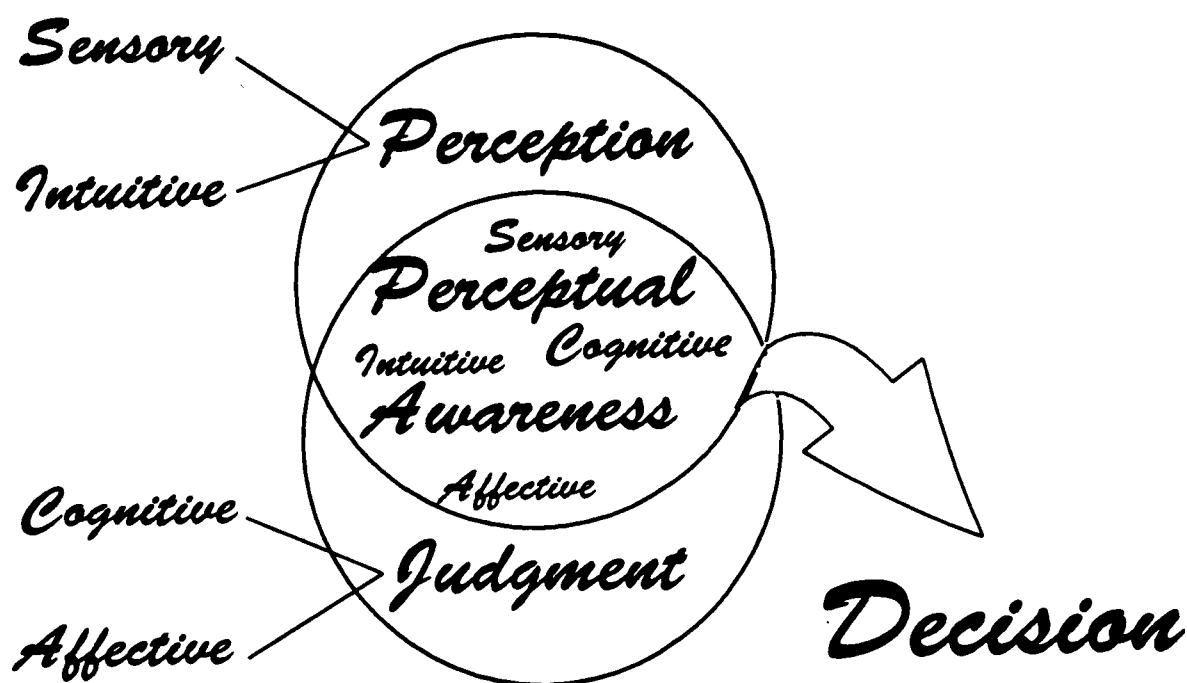


Figure 4. Brooks' Theory of Intrapersonal Perceptual Awareness. The figure depicts the manner in which perception and judgment processes interact in the decision-making process and, as a whole, form clinical decisions.

to, and to have a greater impact on, a decision than perception or judgment alone. That is, King's ideas about perception and judgment contribute to the basis for proposing another concept, intrapersonal perceptual awareness, which is vital to explication of the intrapersonal decision-making process. To summarize, the concepts of the theory proposed by this researcher are perception, judgment, intrapersonal perceptual awareness, and decision.

Perception

Perception is experiencing objects, events, and situations from the environment through concrete sensory and/or unconscious intuitive recognition. According to King, perception is

each human being's representation of reality [and] awareness of objects, situations, events. . . is related to past experiences, concept of self, biological inheritance, educational and socioeconomic groups (1971, p. 94; 1981, p. 20;). Perception is universal. . . .subjective, personal, and selective for each person. . . . action oriented to present. . . .[and] is

influenced by current interests, needs, and future goals (1981, p. 22).

This means that everyone experiences perceptual events and situations via the senses in a unique manner, and the stimuli one perceives are influenced by one's personal, socioeconomic and cultural experiences, education, and personal growth and development within the spatial-temporal dimensions of the environment. Within BTIPA, these intrapersonal factors influence the thoughts, feelings, beliefs, perceptions, values and judgments of the nurses in clinical situations.

Intuition, as an aspect of perceiving stimuli, is not explicit in King's Framework (1981) but is recognized in two of her early works. Firstly, King (1968) stated that "perception is a conscious awareness of objects; an immediate or intuitive cognition" (p. 28). Secondly, King (1971) stated that "often nurses perceive events by intuitive cognition" (p. 98).

Intuition, as an aspect of perceptual recognition, was not carried through in King's later work. However, perceptual intuition is still consistent with King because of her past and current philosophical position of wholism (King, 1990). Therefore, this study expands

King's concept of perception by explicitly including intuition. In King's development of perception she includes both particularistic, such as sensory (e.g., Gibson), and wholistic or Gestalt (e.g., Allport) approaches to perception (King, 1971; 1981).

The Gestalt approach is wholistic. In the Gestalt view, a person perceives in wholes. Allport (1955) says a whole is more than the sum of the parts. For instance, when there are gaps in perceptual experiences, people have an innate ability to fill in the gaps to see whole form. This means that a person has the ability to walk into a situation and comprehend a perceptual experience as a whole.

Allport's Gestalt theory includes two aspects that are important in understanding wholistic form as a basis for extending King's ideas. First, there is immediate sensory awareness that occurs within the person which takes a wholeness-character form "that transcends the characteristics of the parts" (Allport, 1955, p. 113); and perceiving the relationships of the parts in a situation is an essential aspect of the wholeness-character experience (or "the configuration of a thing as it appears to a person," King, 1981, p.

21). If this is true, it follows that perception is the relationship between the immediate, intuitive sensory impressions and the cognitive organization of those impressions in wholeness-character form.

Second, in the wholeness-character form there is a flexibility aspect in that sensory impressions are variable from person to person, and no two people will experience wholeness-character (or "one's image of reality," King, 1981, p. 24) in the same manner. In the Gestalt view, perception is not only stimulus-response or sensory-response. Rather, perception is a whole experience. Therefore, in the wholistic perspective, perception, judgment, thinking, feeling, values (e.g., personal, cultural, etc.), and intuition, cannot be viewed separately, because they are interrelated in the whole experience. Upon this basis, one can propose that perception is (a) an immediate concrete sensory recognition through sight, hearing, smell, taste and touch of environmental events; (b) an intuitive hunch or recognition of an environmental situation (whole-form experience), related to experiential, growth and developmental, educational, cultural, religious, and socioeconomical background;

while also interacting with (c) cognitive and affective judgment.

Judgment

Judgment, as a core concept, is not explicit in King's (1981) Interacting Systems Framework. Therefore, this study expands King's work by explicating judgment as a core concept in the personal system.

Judgment is interpreting objects, events, and situations from the environment through cognitive and or affective processes. According to King, nurses' "values, attitudes, and beliefs influence their evaluation [judgment] of a situation" (1971, p. 95). In King's early work (1971, p. 96) she described perceptual determinants (sociocultural, psychologic, and physiologic factors) that influenced perception. Although not directly stated, King implied that those determinants were also true for judgment in her statement that "perception influences one's evaluation of a situation and evaluation influences perception" (1971, p. 96). According to King "judgments made by nurses are influenced by their knowledge of the physical, psychological, and social components of man,

by their value systems, and by their perceptions in the nursing situation" (King, 1971, p. 92). This means that, like perception, judgment is also influenced by both cognitive and affective processes such as a person's personal and socioeconomic experiences, education, growth and development, subjective values (e.g., personal, cultural, religious beliefs, emotions, value systems, and biases) within spatial-temporal dimensions.

The affective processes can be inferred from King's description of perceptual accuracy as being influenced by a person's emotional state, such as anger, fear, love, and a subjective factor or "set" (King, 1981, p.24). Set may be a value laden force or an attitude which influences perception, judgment and decisions. According to King, decisions are the judgments made in clinical situations, and "these decisions are usually based on one's goals, knowledge, and past experience" (1981, p. 132). Therefore, one can propose that judgment is (a) a person's process of interpreting objects, events, and situations in the environment through both cognitive and affective processes; (b) related to experiential, growth and

developmental, educational, cultural, religious, and socioeconomic background; while also interacting with (c) sensory and intuitive perception.

Intrapersonal Perceptual Awareness

BTIPA proposes that perception and judgment interact in the decision-making process and influence a person's decisions. They are interactive, because perception is action oriented, and "perception and learning are interrelated, [that is] what one knows influences perception and perception in turn enhances cognitive learning" (King, 1981, p. 23). According to King, there is an intrapersonal communication which occurs as a person receives information from environmental stimuli, and the *meaning* of the communication is *within* the person and not within the information. This suggests that there is an *intrapersonal* interaction between perception and judgment processes, through which interpretation (meaning) of environmental events occurs. Even in earlier work, King stated that "perception influences one's evaluation of a situation and evaluation influences perception" (1971, p. 95) which also suggests an *intrapersonal* interaction between

perception and judgment. This implies that the awareness of situational events is what influences action through perception and judgment of those situations. Therefore, intrapersonal perceptual awareness is proposed to be the intrapersonal decision-making process, manifested through interaction between perception and judgment ($DM = f(P \times J)$).

Decision

Decision-making is derived from King's discussion of action in the Interpersonal System. King (1981) says "every action is based on some awareness of perception" (p. 81). Action includes the mental recognition (sensory and intuitive processes) and the judgment (cognitive and affective processes) of events and situations with the intent to do something (intended behavior or action) about the perceptual event or situation. According to King (1981), "action is a sequence of behaviors of interacting systems" (p.60). Since behaviors are observable, it follows that there is an *intrapersonal decision*, or what a nurse decides to do or not to do about an event or situation, in the personal system which precedes interpersonal action.

The decision represents the outcome of the intrapersonal perceptual awareness (the interaction of perception and judgment) decision-making process. This is represented by the intended action, course of action or choice of no action that a nurse makes in a clinical situation. When viewed within nursing process, the intrapersonal decision process precedes implementation of an intended nursing action. In other words, an *intrapersonal* decision is **nonobservable**; when the decision is communicated, it is an **observable** action; when observable (verbally or nonverbally), it is an *interpersonal* communication, which is beyond the scope of this study. King (1981) stated that "in reflecting on the process of decision-making, choice and action enter into the judgment" (p.130). In educating nurses, we are preparing them for interpersonal relationships with their clients, and as such, are developing the *intrapersonal* processes of the student nurse as a whole person. It is the nurse's intrapersonal processes that interact with the client and, ultimately, impact client outcomes. Therefore, it is proposed that (a) intrapersonal perceptual awareness is pre-behavior, and that (b) decision is the outcome of intrapersonal

perceptual awareness, represented by intended action, course of action or choice of no action by a nurse in a clinical situation.

King (1971; 1981) says "a nursing situation is the immediate environment, spatial and temporal reality in which the nurse and client establish a relationship" (1971, p. 24; 1981, p. 2) and interaction, or interpersonal communication, is integral to establishing a nurse-client relationship. Therefore, a clinical situation is proposed to be any situation or setting that represents an immediate or potential nurse-client interaction.

Theoretical Definitions

The following theoretical definitions will be used for this study:

Perception is (a) an immediate sensory awareness or recognition of objects, events, and situations, through sight, hearing, smell, taste and touch of environmental events; (b) an intuitive hunch or recognition of the relationships of parts in an environmental situation (whole-form experience), related to experiential, growth and developmental, educational, religious, cultural, and socioeconomic

background; while also interacting with (c) cognitive and affective judgment.

Judgment is (a) interpreting objects, events, and situations in the environment through both cognitive and affective processes; (b) related to experiential, growth and developmental, educational, religious, cultural, and socioeconomic background; while also interacting with (c) sensory and intuitive perception.

Intrapersonal Perceptual Awareness is the whole-person interaction between perception and judgment in the decision-making process, which is evidenced through an awareness of the nurse's intrapersonal meaning (perceiving, judging, sensing, intuiting, thinking, feeling, valuing, believing) of environmental information that is communicated in a clinical situation. Intrapersonal perceptual awareness is influenced by experience, growth and development, education, religion, culture, and socioeconomic background.

Decision is the outcome of the intrapersonal decision-making process. Decision is pre-behavior and represents an intrapersonal intended action, course of

action or choice of no action by a nurse in a clinical situation.

Clinical Situation is any situation or setting that represents an immediate or potential nurse-client interaction (King, 1971; 1981). This study used a written vignette of a simulated clinical situation to represent an immediate nurse-client situation.

Assumptions

King's (1981) assumptions about human beings which are appropriate to this study are:

1. Individuals are sentient beings.
2. Individuals are rational beings.
3. Individuals are perceiving beings.
4. Individuals are action-oriented beings.
5. Individuals are time-oriented beings (p. 143).

Additional assumptions which are important for this study:

1. Perception is universal (King, 1981, p. 22).
2. Perception is dynamic and changes within spatial-temporal situations.
3. Perception is subjective, personal, and selective for each person (King, 1981, p. 22).

4. Perception is action oriented to present (King, 1981, p. 23).

5. Perception is an awareness of objects, situations, events, related to concept of self, biological inheritance, educational, and socioeconomic groups (King, 1981, p. 20).

6. Perceptual awareness is central to good nursing judgment (Benner, 1984, p. xviii).

7. Perceptual accuracy is important in nurse client interactions (King, 1981, p. 24).

8. Judgment is influenced by knowledge of the physical, social, and psychological component of humans, by one's own value system, and by one's selected perceptions of environmental situations (King, 1971, p. 92).

9. Perception and judgment occur within spatial-temporal situations.

11. Intrapersonal perceptual awareness cannot exist without perception and judgment.

12. Intrapersonal perceptual awareness is unique to individuals.

13. Intrapersonal perceptual awareness is dynamic and varies within spatial-temporal situations.

14. Knowledge of self, self concept, and body image are influenced by perception and judgment.
15. Intrapersonal perceptual awareness is variable with growth and development.
16. Self is integral to perceptual awareness.
17. Individuals are wholistic beings.
18. All nurses have been taught some form of decision-making in nursing process.

Research Question

How do the intrapersonal factors of perceiving, judging, sensing, intuiting, thinking, and feeling contribute to senior baccalaureate student nurses' clinical decision-making?

Significance

This study is significant because it is the first study that addresses clinical decision-making from a nursing theoretical perspective. To date, there have been other studies of clinical decision-making from different perspectives, such as information processing theory, diagnostic reasoning, ethical and intuitive decision-making. However, this is the first study which explores decision-making as one wholistic intrapersonal process, by using Brooks' Theory of

Intrapersonal Perceptual Awareness, which was derived from Imogene King's Interacting Systems Framework (1981). The theory is also the first to provide a means, within nursing process, to focus on the nurse relative to nurse-client interactions.

Limitations

1. This study was limited to a convenience sample which is not representative of all baccalaureate nursing students.

2. Since students were asked to make a decision by responding to a simulated situation vignette, their responses may not have been a true representation of their actual intrapersonal processes. A major limitation with use of vignettes is the artificial setting requiring subjects to imagine what their actions would be in the situation (Lanza & Carifio, 1990).

3. This study was limited to generic baccalaureate nursing students who were in their senior year and have had prior clinical experience.

4. Since this study proposed a new theory for nursing education, its utility for education was not

pre-established. Therefore, the ideas proposed in the theory were piloted and explored in the educational setting for the first time in this study.

CHAPTER II

Related Literature

Introduction

In this study a middle range Theory of Intrapersonal Perceptual Awareness was developed and explored at a descriptive level. The relationships among perception and judgment processes, in clinical decision-making, were examined in baccalaureate student nurses. This chapter discusses related literature which supports the development and operationalization of Brooks' Theory of Intrapersonal Perceptual Awareness.

The majority of the literature related to perception and judgment and clinical decision-making can be divided into three groups: 1) sensory-analytical (perception-judgment) approaches to clinical decision-making; 2) intuition and clinical decision-making; and 3) that which supports the affective processes of judgment, proposed in the theory for this study. This chapter is divided into four sections: 1) literature that addresses sensory-analytical decision-making approaches; 2) literature that addresses intuition and clinical decision-making; 3) literature that addresses

affective processes of judgment and decision-making; and 4) summary and conclusions.

Sensory-Analytical Approaches to Clinical Decision-making

Information processing, diagnostic reasoning, and decision theory have been approaches used in studies examining clinical decision-making. LeBreck (1989), in a review of literature of clinical judgment, identified information processing and decision theory as the two dominant theoretical perspectives used in clinical judgment research. Often these approaches overlap (LeBreck, 1989; Radwin, 1990; Tanner, 1986). This section is subdivided according to studies using information processing, diagnostic reasoning and decision theory approaches to examine clinical decision-making.

Information processing and clinical decision-making.

Information processing is a problem solving approach which is task oriented. Within information processing there is a limit to the amount of cues or information that a person can process. This limit is determined by the task environment, and it is the task

environment that drives the decision process (Tanner, 1986).

Corcoran (1986a; 1986b), in a study reported in two separate publications, used the information processing approach and simulated situations, to examine differences in novice and expert hospice nurses' approaches in planning tasks related to pain control. The sample consisted of 5 novice nurses (those with fewer than 6 months hospice experience) and six expert nurses (those in leadership positions who had at least 18 months hospice experience). Corcoran found that expert nurses tended to use broad and varied approaches, according to the complexity of the task, whereas novice nurses used a narrow approach and were task specific. Experts developed better plans in more complex tasks, whereas novices developed better plans in less complex tasks. There was no significant difference in the number of alternative nursing actions generated (6 to 25 alternative actions in a case) between novice and experts. Additionally, expert nurses tended to impose more information into situations than was presented in the case simulations.

Corcoran theorized that some of the variability in task functions could have been influenced by subjects' educational and experiential background. Corcoran did not address the intrapersonal processes that influenced the decisions and asserted that more knowledge is needed about decision-making before specific strategies can be useful in education.

Similarly del Bueno (1990), using video simulation of clinical situations, examined the relationship between educational preparation and clinical judgment in 563 staff registered nurses from different hospital settings nation wide. No significant relationships were found between nurses' education and their decision or intervention responses. An incidental finding in this study that bears consideration was that, in addition to the registered nurses, 51 licensed practical nurses completed the simulations and performed "as well, if not better than the registered nurses except [*italics added*] in ability to give acceptable rationales for their decisions" (del Bueno, 1990, p. 293).

Information processing was the framework used when Henry (1991) examined clinical decision-making

processes of 142 critical care nurses' management of two types of computer simulated tachyarrhythmias. Henry's study was task specific, and the decision tasks focused on type and number cues collected, type and number of interventions (e.g., drugs selected), and the time to arrive at a decision to treat or not to treat the tachyarrhythmia. Clinical outcome was determined by cure or death of the simulated patient and the subjects' proficiency score. Mean proficiency scores were low with poor patient outcomes. Henry attributed this to nurses' failure to recognize the tachyarrhythmia and implement medication treatment protocols. Henry recommended that further research examine amount, type and differentiation of clinical decision-making information.

Information processing, diagnostic reasoning, and clinical inferencing are sometimes used interchangeably. This is evidenced in a study completed in the mid 1980's and reported in two separate publications (Westfall, Tanner, Putzier, & Padrick, 1986; and Tanner, Padrick, Westfall, & Putzier, 1987). This study used information processing theory to examine 28 nursing students' and 15

practicing nurses' clinical inferences (described in Westfall et al.) or diagnostic reasoning (described in Tanner et al.), in two video simulated clinical situations.

Diagnostic reasoning or clinical inferencing was evaluated according to task characteristics such as number of hypotheses (inferences) generated, amount of objective data needed to generate hypotheses (inferences), and the accuracy of the diagnostic hypotheses (inferences). The more educated and experienced tended to develop more complex hypotheses, but the number of hypotheses was not significantly varied between groups.

Diagnostic reasoning and clinical decision-making.

Diagnostic reasoning is similar to cue recognition in that the focus is on the objective or empirical indicators. In a review of literature on research in diagnostic reasoning, Radwin (1990) pointed out that diagnostic reasoning is a form of clinical judgment and involves information processing. Tanner (1986), in a review of literature on research on clinical judgment, pointed out that virtually all

diagnostic reasoning studies were task specific and involved information processing strategies.

Grant and Kinney (1990), in a three-part study involving 26 content experts and 30 staff nurses, used a diagnostic reasoning framework to examine the validity of defining characteristics to confirm a nursing diagnosis of *Altered Level of Consciousness*. The decision task required subjects to verify presence or absence of defining characteristics, proposed during phase one of the study, by assessing 30 patients with nervous system disorders. When the subjects identified a defining characteristic, they evaluated its importance by assigning a number value according to a magnitude rating scale. While the findings supported the validity of the nursing diagnosis, there was a variation in the importance and frequency of identified defining characteristics. Grant and Kinney stated that the nurses' "personal variables such as physical, mental, and emotional state were not assessed and may have influenced diagnostic reasoning and, thus, the scores assigned to the defining characteristics" (p. 410).

White, Nativio, Kobert, and Engberg (1992) used a diagnostic reasoning framework to examine clinical decision-making processes of 27 nurse practitioners. Subjects, via simulated interactive video of a patient with a gynecological problem, were asked to list diagnostic hypotheses from simulated pre-encounter data and to identify the one most important subjective cue and one most important objective cue that influenced their diagnosis. These authors found that the subjects' initial diagnostic hypotheses from pre-encounter information guided the subjective and objective data collection.

The single most important subjective piece of information obtained was the patient's complaint and the most important objective information obtained was either a physical examination or laboratory diagnostic test related to the person's chief complaint. The computer log indicated that the family nurse practitioners ($n = 11$ experienced and $n = 10$ inexperienced) asked more questions related to the chief complaint than the gynecological nurse practitioners ($n = 6$) which implies that education and experience influences the diagnostic process. Two

subjects (1 experienced and 1 inexperienced family nurse practitioner) made incorrect diagnoses which the authors attributed to possible lack of understanding in interpreting the results.

Three studies that evaluated clinical reasoning processes of student nurses focused on cue recognition or cue discrimination. In one study, Itano (1989) compared, via audio taping of different nurse-patient interviews, the number and type of cues collected by 13 student nurses and 13 experienced nurses. Itano found that registered nurses collected more cues than student nurses; there were no significant differences in type of cues. Itano recommended that further research use the same patient situation and examine how the cues are used.

In another study, Thiele, Holloway, Murphy, Pendarvis, and Stucky (1991) examined novice baccalaureate students' decision-making patterns in a simulated situation. Students were asked to identify relevant and nonrelevant cues, and to determine appropriate nursing diagnoses and interventions. The students were about 75 percent accurate in cue discrimination and selection of nursing diagnoses and

about 50 percent accurate in determining nursing interventions. In a third similar study, Sanford, Genrich, and Nowotny (1992) compared clinical judgment of baccalaureate ($n = 78$) and non-baccalaureate ($n = 38$) graduate nurses. Subjects were presented video taped vignettes and were asked to identify the patient problem, specify nursing interventions and rationale, and identify preventive actions. A t test revealed no significant differences between the two groups. Both studies, Thiele et al. and Sanford et al, recommended future research efforts toward identifying and including all processes of clinical judgment.

Cognitive reasoning in clinical decision-making has also been examined in qualitative studies. Corcoran, Narayan, and Moreland (1988) examined four telephone triage nurses' cognitive processes by having them "think aloud" their decision reasoning in response to hypothetical cases. The findings revealed that the subjects' diagnostic reasoning was context dependent, included activating initial hypotheses and evaluating the hypotheses, and that the subjects used three types of knowledge in their reasoning: factual (e.g., classic signs and symptoms); practical (e.g., gained from

experience); and rules of thumb (e.g., patterns that may determine life or death).

Jacavone and Dostal (1992) examined actions and thought processes involved in clinical judgment of four expert and four beginner coronary care nurses' assessment and management of cardiac pain. The subjects were initially interviewed based on a model case and were also observed and interviewed as they cared for at least one coronary care patient. They found that the subjects' judgment involved practical knowledge (e.g., thinking about specific drug actions, infusion rates, active titration, etc.); patient vigilance (e.g., close presence to the patient and recalling theoretical and practical knowledge to rapidly assess cues and recognize subtle patient changes); and specific education (e.g., learning the concepts of absolute relief and residual pain and determining the difference).

In a British study, Luker and Kenrick (1992) explored the sources of influence in 47 community health nurses' decision-making. They identified 35 sources of influence in decision-making which included things such as literature (e.g., journals, reference

books, media, newspapers); education (formal, specific, regulations, and policy); experience (e.g., practical, knowing the patients and situations, association with colleagues and other professionals); and intuition (e.g., "gut feelings" about patient or situations, and experience in similar cases). The authors stated that further investigation should explore the way nurses differentiate and use their knowledge in situations.

Similarly, Prescott, Dennis, and Jacox (1987) examined factors that influence the decision-making behavior of staff nurses. They identified organizational (e.g., institution, work setting, type of nursing, staffing) and personal factors (e.g., education, experience, knowledge, interpersonal style and relationships) as the two major influences on clinical decision-making.

Decision theory and clinical decision-making.

Decision theory is prescriptive and provides a structure for the formal analytic process of making rational decisions (Ransohoff & Feinstein, 1976; Tanner, 1989). Decision theory employs mathematical probability and frequently uses decision trees to depict how cues should be assessed, organized and

interpreted. At each branch there are two possible actions which the decision maker chooses between, based on the relative utility of the most highly valued outcome (Kassirer, 1976; Ransohoff & Feinstein, 1976; Tanner, 1989).

Thiele, Baldwin, Hyde, Sloan, and Strandquist (1986) used decision theory to teach cue recognition to 80 baccalaureate nursing students. In a pre-test students were asked to identify and sort relevant and nonrelevant cues, and to link cues in simulated clinical situations. Following the pre-test, they were taught the diagnostic reasoning process via computer assisted instruction. The students were then presented with new simulated situations and cue recognition was examined in a post-test. The findings revealed higher mean scores where the situations were familiar to the students; a significant decline in the mean scores on the post-test (researchers attributed this to differences in difficulty level of pre- and post-tests); and a significant increase in cue accuracy and clinical decision-making. The authors concluded that cue recognition and sorting could be taught.

In a study reported in two separate journals, Hughes and Young (1990) and Hughes and Young (1992) examined the stability and task complexity of clinical decisions, in relation to education, experience, and situation variables, in 101 medical surgical nurses from three separate public teaching hospitals. Subjects were presented a *Decision Analytic Questionnaire*, composed of three postoperative patient narratives and corresponding decision tasks. Subjects had to contemplate relative risks and benefits, of the tasks in relation to possible outcome, as they selected from four mutually exclusive alternative interventions. The researchers found that (a) slightly more than half ($n = 55$) made stable clinical decisions; (b) there was no significant relationship between experience, basic nursing education and stability of decision-making; (c) subjects who were educated in foreign countries made significantly less stable decisions; and (d) decision-making varied with decision task. The authors theorized that cultural values may have influenced the responses and also pointed out that the study did not examine if decisions were correct or *why* nurses made their decisions.

A post-test experimental design was used to examine the effect of teaching decision analysis to 68 Canadian baccalaureate nursing students in a study by Shamian (1991). The experimental group ($n = 37$) was taught decision analysis via videotape and interactive video. The control group ($n = 31$) was presented with a nondecision analysis interactive video. Following the interactive session each group responded to a written simulated situation by prioritizing each intervention appropriate to each diagnosis, and contemplating the short term goals and the probability outcome values. To strengthen the effect of the experimental intervention, the researcher used simulated ethical situations "because ethical cases were nonclinical, yet of concern to nurses" (p. 62) as the control group intervention, while the experimental group was receiving the decision analysis intervention. Shamian found statistically significant ($p < .0001$) differences between the two groups and thus concluded that use of decision theory enhanced students' ability to prioritize interventions.

Aspinall (1979) examined the use of a decision tree and diagnostic accuracy in 90 practicing nurses

randomly assigned to either an experimental or one of two control groups. One control group received only a written case study, the second control group received case study and a list of disease states, and the experimental group received the control groups' information plus a decision tree. Aspinall found that members of the experimental group, using the decision trees, were significantly more accurate in determining clinical diagnosis than either of the control groups.

Baumann and Deber (1989) examined the decision analysis of 40 intensive care unit nurses in rapid decision-making situations. The subjects were presented with six case vignettes without any prescribed sets of decisions and were asked to describe their actions as they would respond to the situations. The responses were transcribed to cards and evaluated via modified Q-sort. The findings did not reveal a clear set pattern of actions or interventions. The researchers concluded that decision analysis is not effective where there are not mutually exclusive alternatives and cannot be used if the probability outcome of the intervention is unclear.

Panniers and Walker (1994) used a decision-analytic process and the Delphi method to examine, in two phases, thirty one staff nurses' decision alternatives regarding methods for changing dressings on a pressure ulcer. The first phase involved 4 questionnaires in which subjects were presented a hypothetical case; they were asked to select from possible dressing care alternatives, and rank their intuitive choices, according to personal preference. The second phase focused on determining the value of the choice, based on a score that was assigned to each possible dressing alternative. The subjects had only a 35% agreement between the intuitive (subjects' preferred) choice and the quantitative value. The authors concluded that the "moderate agreement between nurses' intuitive judgments and prescriptive treatment choices begins to lend some validity to the decision-analytic model" (p. 249). However, the opposite conclusion should be reached because the intuitive choices are intrapersonal while task values are rationally determined.

Summary.

Information processing and cue recognition have comprised the primary focus in sensory-analytical studies of decision-making. This focus fails to consider intrapersonal processes; the emphasis is on rational, particularistic information and tasks while excluding the wholistic, humanistic, intrapersonal processes which also impact clinical decisions. The sensory analytical frameworks such as information processing are mechanistic and oriented toward outcome rather than the intrapersonal process involved in arriving at the decision outcome.

Intuition and Clinical Decision-making

In a hallmark study describing nursing practice, skill acquisition, and perceptual abilities, Benner (1984) identified "perceptual awareness" (p. xviii), particularly intuition, as the difference between beginner nurses and expert nurses in increasing conceptual clarity. Benner used the Dreyfus Model to explain skill acquisition over time. Within this model, as the nurse gains experience, that experience enables the student to rely on less abstract principles and more on experience (concrete principles).

According to Benner, the beginner nurses relied more on rational empirical perceptual information; the expert nurses relied on intuitive information as well as the rational empirical information; and intuition is what distinguished between beginner and expert.

Benner, Tanner, and Chesla (1992) interviewed (in groups) 105 critical care nurses about their practice. Advanced beginners focused primarily on the immediate situation and task organization, concrete signs and symptoms, and had limited self awareness in relation to the patient situation. In contrast, the proficient and expert nurses had increased self-awareness and perceptual grasp of the situation.

Gerrity (1987), using the Myers-Briggs Type Indicator, described four basic mental processes involved in perception. These four processes were classified into two perception processes which included intuition and sensing and two judging processes which included thinking and feeling. According to Gerrity, persons use all four of the processes in decision-making, and over a lifetime of experiences, learn to favor one process over another. Using data from 3,103 nurses, Gerrity found that most nurses preferred the

sensory perceptual process which she theorized is consistent with nurses' traditionally favored rational linear approach to decision-making. Although Gerrity expressed the need for developing the intuitive aspect of decision-making by "translating intuition in operational and functional knowledge" (p. 71), she did not suggest any operational method to do this.

In an article regarding the need for intuition as well as analysis in education, Miller and Rew (1989) argued that the emphasis on rational empirical information may actually "stifle the intellectual development" (p. 84) of nurses, because they are discouraged from drawing conclusions before all evidence is gathered or from using any information that cannot be empirically substantiated. Like Gerrity, Miller and Rew concluded that research to enhance perceptual capabilities is needed as well as expansion of the nursing process framework.

Pyles and Stern (1983) studied 28 critical care nurses' decision-making about patients developing cardiogenic shock. They described intuition in the decision processes as *Nursing Gestalt* "whereby nurses link together basic knowledge, past experiences,

identifying cues presented by patients, and sensory cues including what nurses call *gut feelings*" (p. 52).

They further characterized the *gut feelings* as the "essence [italics added] of the art of nursing" (p. 54) and identified several processes which nurses used as a basis for "gut feelings". One process was that of "falling out of pattern" (p. 54) or subtle cues of something between what is and what should be. Another process was the patient's intuition in which patients reported to the nurses that something was going to happen. A third process was the nurse's intuition where the nurse described a sixth sense about something that was going to happen. The authors recommended teaching the concept *Nursing Gestalt* to neophyte nurses to enhance their role transition.

In a concept analysis of intuition Rew (1986) identified three primary attributes of intuition: 1) knowledge of fact or truth, as a whole; 2) immediate possession of knowledge; and 3) knowledge independent of the linear reasoning process (p. 23). Two years later, in a qualitative study, which included both critical care nurses and home health nurses, Rew (1988) used the aforementioned attributes as a guide in

analyzing fifty-seven nurses' responses concerning intuition in clinical decision-making. From Rew's study additional attributes emerged which included "inner knowing, sensing, feeling, and strength of feeling that affects perception" (p. 28) and emotions such as apprehension, excitement, "antsy" [sic] and uneasy. According to Rew's findings from the nurses' descriptions of decision-making and situational outcomes, the attributes of perception were not experienced in a rational, analytical and linear process. Also, some nurses "found it difficult to differentiate their thoughts from their feelings while some found themselves consciously analyzing why they felt as they did about a particular situation" (1988, p. 30). Rew concluded by stating the need for educators to "recognize and teach concepts related to the intuitive precognitive components of making decisions in clinical practice" (p. 153).

Intuition is further delineated in several more qualitative studies. Rew (1990), in a third study on uses of intuition in twenty-five critical care nurses, found that all of the nurses used intuition as well as rational information at various stages of the nursing

process. Similarly in an interpretative study, Minick (1992) studied the process used by thirty critical care nurses in early recognition of clinical problems in critical care situations. Minick identified two primary patterns of early recognition from each subject in her study: (a) the perception of early recognition engendered through caring and involvement with the client; and (b) practical knowing which includes knowledge used in skill performance. Minick's findings also revealed experience as a "requisite for early recognition" (p. 30) and Minick suggested that educators begin teaching early recognition by having nurses look for subtle signs in specific patient situations.

Benner and Tanner (1987) examined 21 expert nurses' uses of intuition and identified six major aspects of intuitive judgement. One aspect was *pattern recognition* which pertained to recognizing patients' patterns of responses. Second was *similarity recognition* in which there was an awareness of previous patients with similar (or dissimilar) conditions. A third aspect was *common sense understanding* (e.g., how patients look, eat, talk). A fourth aspect was *skilled*

know-how, such as safe drug dosages. Fifth was a sense of salience or what was important (or not important). The sixth theme was *deliberate rationality*, in which the nurse contemplated facts and perspectives.

In a more wholistic approach, Booher (1992) examined intuition in forty-five medical-surgical nurses and found that most of the nurses in her study used intuition at some time or another. Themes from Booher's study were similar to other intuition studies and included examples such as knowing the patients' patterns through caring for them (p. 67); recognizing subtle differences (p. 67); knowing something is not right (p. 63); knowing immediately and knowing not based on concrete data (p. 63). According to Booher, even though nurses did not explicitly identify intuition, their responses provide insight as to the process of intuition in that when the nurses sensed something more and searched for a context (p. 67) they were attempting to identify subtle changes, and to empirically verify that "something more".

In a phenomenological study, Agan (1987) interviewed seven holistic nurses, who were members of or connected to the American Holistic Nurses

Association, about their perceptions of holistic nursing practice. In holistic nursing philosophy, an individual cannot be understood in isolated parts; instead, the parts (mind, matter, and life) are interconnected and the person can only be understood in the larger unified whole (Kramer, 1990). In Agan's (1987) study, a major theme that emerged was a way of intuitive knowing by a feeling or sensing experience which he described as "intuitive, psychic, subconscious, or instinctual" (p. 63). Another theme that emerged was a connection between nurse and client which connected in some way to a greater whole.

Using a grounded theory approach, Young (1987) examined intuitive experiences in 41 registered nurses from a variety of clinical settings and agencies. Young delineated two intuitive dimensions: functional and personal. The functional dimension included vague cues, lack of cues, or a feeling (hunch) cue and a judgment which included conclusions and actions relating to the presenting cue or feeling. Young described the functional dimension as both a process and a product in that the cues and the judgment could

not be separated. The personal dimension included five attributes.

One, intuitive judgments required contact with the patients. Two, there was an element of self-receptivity which Young defined as "the ability to be open and vulnerable" (p. 59). Three, experience was identified as an essential element of intuition, which was also identified in previous studies (e.g., Benner, Rew, Booher) on intuition. Four, the nurses' energy influenced "the readiness of the nurse to receive information" (p. 60) and this is what King (1981) describes as "set" (p. 24). The fifth element that Young identified was self-confidence. Young's study demonstrated "the interactive quality of [the] diagnostic process. . . and [according to Young's findings] intuition is grounded in both knowledge and experience" (p. 60) in making clinical decisions.

Summary.

Many qualitative studies have been done on intuition and clinical decision-making in different situations such as critical care, medical-surgical, and community situations. Intuition can be regarded as an intrapersonal phenomenon, that is, it occurs within the

person and varies from person to person. Intuition is a humanistic concept because there is an attempt to understand and recognize the intuitive experience within the person; that is, the intrapersonal experience. While studies have been done on intuition, they have focused primarily on the experience in specific situations (e.g., critical care). Evidence from these studies revealed that intuition has been experienced by many nurses. However, "fundamental nursing theory about [intuition] is lacking. . .[and] even less is known [as to whether or not] it can be taught" (Miller, 1993, p. 597). Intuition is only part of the whole perceptual experience that influences clinical decisions.

Affective Judgment and Clinical Decision-making

Affective judgment, within the Theory of Intrapersonal Perceptual Awareness, is that process of judgment that includes a person's beliefs, emotional feelings, biases, religious, cultural, social and personal values that impact perceptual awareness and ultimately clinical decisions. This is a strong intrapersonal process that is value laden and may unconsciously impact nurses' decisions. No studies in

nursing have explicitly examined the impact of a person's affective processes in clinical decisions. However, some studies have been done which imply that the affective process is a strong dimension that impacts the decision process.

For example, the affective influence on nurses' clinical decisions was inferred in a study by Erlen and Frost (1991). This study, although not explicitly stated by the researchers, examined intrapersonal decision processes by evaluating 25 nurses' perceptions of their decisions about ethical dilemmas. Ethical dilemma was not pre-defined for the subjects, and the subjects' own perceptions of ethical dilemmas were related to interactions with other individuals, particularly physicians, and their frustrations (dilemmas) related to these interactions. Although the descriptive findings were not consistent with the stated purpose of the study, there were several implications that can be drawn and are discussed in the next three paragraphs.

One, the subjects' interaction differences (ethical dilemmas) were based on differences in values between interacting individuals (e.g., nurse and

physician). What the physicians valued as important for a patient was not the same as what the nurse valued as important for the same patient. Therefore, from the nurse's perspective, these values impacted the decisions and outcomes of the patient situations.

A second implication, from the descriptive phrases that nurses used in describing factors influencing their actions, reflected a strong emotional component, (e.g., nurses' feelings) which is also an aspect of the affective judgment process, such as "feeling trapped, caught in the middle, helpless, frustrated" (Erlen & Frost, 1991, p. 401). These are strong emotional variables that are reflective of an affective involvement in a clinical situation which will impact the perceptual awareness and thus the outcome of clinical decisions. While Erlen & Frost's study pertained to interpersonal interactions, it was the intrapersonal frustrations that were the most apparent influences.

The third implication, from Erlen and Frost's (1991) study, is the need to include the affective judgment process in preparing student nurses for clinical decision-making. To prepare students for only

sensory analytical decision-making is preparing them to take a particularistic, rather than wholistic approach to clinical situations.

Kleven (1991) presented a decision model for teacher-student situations that parallels the affective process of judgment in nurse-client situations being proposed in this study. According to Kleven's model, teachers' classroom decisions are both conscious and unconscious, and the decision process includes perception, judgment, decision, and behavior representing the decision. In this process the teacher perceives the situation (based on information processing capacity); judges the situation based on both knowledge and emotional variables (perception variable influences judgment and judgment variable influences perception); and the teacher makes a decision selecting from a behavioral repertoire that he or she values as most important.

According to Kleven the "quality of judgment depends on knowledge variables and emotional variables" (p. 291). Kleven's emotional variables of judgment are consistent with the affective process of judgment proposed in this study. Kleven's concern is with

perception and judgment in classroom situations; whereas, this study is concerned with perception and judgment in clinical situations. Kleven also asserts that "an interactive teaching situation may evoke [intrapersonal] emotions that preclude rational decisions" (p. 292). Klevin's assertion parallels the affective judgment process proposed in this study, in which a person's value and belief systems impact perceptual awareness and decisions, and may also preclude or impact the purely rational approach in clinical situations. It is this affective process that may help explain intrapersonal differences such as that evidenced in previously addressed sensory-analytical and cue recognition studies.

In an article presenting supporting literature to enhance clinical decision-making for elderly clients in critical care, MacLean (1989) discussed variables other than sensory analytic, that often influence nurses' decisions. MacLean cited examples such as "cognitive biases, values, risk-taking behaviors, administrative policy. . . . attitudes, values, and stereotypical beliefs" (p. 75) and concluded that a person's awareness of factors, both objective and subjective,

that influence his or her perception and judgment should enhance clinical decision-making.

Affective judgment has been demonstrated in recent studies (Nash, Edwards, & Nebauer, 1993; Pederson, 1993a; Pederson, 1993b; Waltman & Corless, 1990) in which the *Theory of Reasoned Action* was used to study the relationships of nurses' beliefs, attitudes and intentions toward clients in various clinical situations. These studies examined nursing students' attitudes and beliefs about clients with AIDS (Pederson, 1993a) and clients who were suicidal (Pederson, 1993b); registered nurses' attitudes about dying patients (Waltman & Corless, 1990); and registered nurses' attitudes about pain assessment (Nash, Edwards, and Nebauer, 1993). Even though these studies used a different theoretical approach, they have relevance for the current study. Their findings provide evidence that attitudes and beliefs impacted nurses' intended care behaviors toward clients in respective situations. Pederson (1993a) concluded that more than facts are involved in clinical decisions "because social problems such as AIDS have a strong

affective component [and, as such] they cannot be dealt with only on a level of factual knowledge" (p. 80).

In an article on values and ethics in professional practice, Omery (1989) stated that a persons' values and beliefs may impact decisions. According to Omery, an individual's values are organized in a hierarchial manner producing a strong motivational component towards a person, object or idea "that is more likely to manifest in an affective situation" (p. 500) and thus consciously or unconsciously influencing or directing the choices a person makes. According to Omery there are moral values which "can be differentiated from other types of values" (p. 501). Moral values can be both personal and professional (e.g., family, religion, institution), and these values affect the professional behavior of individuals.

Similarly, Greipp (1992) presented a model for ethical decision-making with variables which are similar to what is being proposed in Brooks' Theory of Intrapersonal Perceptual Awareness. Greipp's variables that impact ethical decisions include educational, personal and professional experiences, cultural and belief systems, which are also factors within

Intrapersonal Perceptual Awareness. According to Greipp, "the heart of a dilemma lies not in the ethical framework but in the individual's belief and value systems" (p. 737) or in other words, the intrapersonal value and belief system, which in Greipp's model is integral to self. Greipp asserts that "ethical decisions should be an integral component of all practical, not just monumental decisions involving life and death donors and transplants" (p. 734). Since the ethical dimension pertains to a person's values and belief systems, that dimension is viewed as an aspect in every decision when the beliefs and values of individual nurses are considered in decision-making.

In contrast, Gordon, Murphy, Candee, and Hiltunen (1994) presented an *Integrated Model for Clinical Judgment*. This model integrates three types of decision-making: diagnostic reasoning, generic process (i.e., nursing process), and ethical reasoning. According to the authors, information processing is the factor that links the type of decision-making. The authors also indicate that values and beliefs influence the choices that are made in the data collection. The model is interpersonally focused and fails to focus on

the intrapersonal processes involved in making the choices.

Ferrell, Eberts, McCaffery, and Grant (1991) examined 53 nurses' responses to a survey on how nurses made decisions in caring for patients with pain. The most influencing factors were patients themselves, physicians' orders and communications, and nurses' own knowledge and beliefs. An unexpected finding was that the nurses sometimes were concerned "that the pain was real" (p. 296) and the authors theorized the possibility that nurses may have provided medication when it was not needed. Conversely, what the authors did not point out was the possibility that the medication could have been withheld when in fact it was needed. In an earlier study, Mason (1981) examined factors that influenced nurses' inferences regarding patients' pain in simulated patient situations. Mason found beginner nurses (less than one year experience) inferred significantly higher degrees of pain than more experienced nurses (6-10 year experience). Alarming, Mason suggested the possibility of nurses, over time, becoming desensitized to patient suffering, which was cited as an impetus for the following study.

Holm, Cohen, Dudas, Medema, and Allen (1989) surveyed the effect of 134 nurses' personal experiences with pain on assessment of patients with pain. They found the assessment of a patient's pain was significantly related to the intensity of the nurses' own personal pain experience. The authors cited a need to increase nurses' awareness and possible biases related to pain assessment.

Only one study explicitly examined the impact of students' affective states on their perceptions of patients in clinical situations. Hornblow, Kidson, and Ironsides (1988) examined how 101 fourth year medical students' own emotional states impacted how they rated patient anxiety and depression levels in clinical situations. They found that students who were "relatively more anxious perceived more anxiety and not more depression in patients, and [students] who were more depressed perceived more depression but not more anxiety in patients" (p. 18). While this study involved medical students, its findings have relevance for teaching nursing students because of the potential intrapersonal affective influences in clinical situations which can also influence nurses' decisions.

An implication that can be drawn from this study for education is to help students to be aware of and to consider their own emotions (feelings, biases, beliefs) which may significantly impact their perception and judgment in clinical situations.

Summary.

Very few studies that have been done in nursing have explicitly examined the affective judgment process. Like intuition, the affective process does not fit within typical linear, rational, sensory-analytical, or nursing process approaches and thus has not been examined. In the traditional nursing process approach, affective judgment does not fit because the nursing process focuses on rational-empirical information; nurses are taught to separate their biases and personal beliefs. Affective judgment is a strong intrapersonal process and is value laden which may unconsciously impact nurses' decisions.

Chapter Summary and Conclusions

A number of studies have examined aspects of perception and judgment, but no studies have looked at intrapersonal decision-making wholistically. Sensory analytical studies have focused on particularistic

phenomena (e.g., cue recognition and sorting, selecting appropriate diagnosis, selecting interventions). A particularistic approach is expected when decision-making is task specific in that persons are expected to perform particulars within the parameters or protocols outlined by the task. When decision-making is guided by mechanics (e.g., information processing) and the concern is the task, then findings such as del Bueno's (1990) (where licensed practical nurses scored as well if not better than registered nurses in decision simulation) are not surprising.

In task focused situations, decision reasoning involving perception and judgment can be viewed as being framed by extrapersonal criteria (e.g., information processing) which excludes individual intrapersonal processes and narrows the perception and judgment to include only the empirical rational information according to the decision task. When extrapersonal criteria guide the decision task, the outcome is also examined according to external criteria; the decision excludes human differences because the extrapersonal frame does not allow for

human differences. "If evidence seems inconsistent with a chosen answer, a person needs to pay particular attention to [individual differences]" (Wurzbach, 1991, p. 32) and the differences can only be addressed by using a wholistic, intrapersonal rather than a particularistic, extrapersonal approach.

The intrapersonal decision process and the wholistic evaluation of clinical situations is further impeded when diagnostic reasoning and cue recognition is the focus. Diagnostic reasoning is similar to information processing in that the focus is on sensory information. Cognitive judgment is implicit because prioritizing and grouping of cues, and inferencing involves interaction between perception and judgment during the decision-making process. There are several limitations of the diagnostic reasoning studies.

First, diagnostic reasoning which incorporates cue recognition and information processing (Radwin, 1990) is externally (extrapersonally) focused on empirically identifying cues and does not allow for intrapersonal differences. Within diagnostic reasoning the decision outcome is expected to be the same and to be arrived at

in the same manner regardless of the educational or experiential level of the individual.

A second limitation of this body of research is that diagnostic reasoning is task specific and emphasizes sensory perceptual information. It can be viewed as applying an extrapersonal protocol or rule to an intrapersonal phenomenon with the expectation that the outcome (decision) of the person's reasoning process will be wholistic, thus extending beyond the boundaries of the protocol. In other words the expected outcome is more than the process allows.

The third and most important implication is that diagnostic reasoning and information processing approaches encourage a very narrow situation-specific, particularistic view (or method of inquiry) which fails to consider human differences. Wurzbach (1991) argued that "conclusions about legitimacy of a judgment should be based upon the professional context of the decision [and] presently there is no model that predicts the heuristics in response to different situations" (p. 31). Brooks' Theory of Intrapersonal Perceptual Awareness proposed in this study does include the professional context and furthermore and more

importantly, is the *first* to do so! Intrapersonal perceptual awareness is one concept that is wholistic and extends beyond empirical-rational information by wholistically incorporating perception and judgment. Within intrapersonal perceptual awareness professionals would be aware of how their perception and judgment influences their clinical decisions.

Intuition has been examined qualitatively in many studies. There is evidence that nurses do experience intuition in clinical situations and decision-making. However, as Miller (1993) pointed out there is a lack of nursing theory about intuition and "little is known about how it develops, how the linkages between prior experience and present knowing occur, and about how it can be taught" (p. 597). Intuition, as defined in the theory proposed in this study, addresses what Miller pointed out is lacking. Brooks' Theory of Intrapersonal Perceptual Awareness provides a nursing theoretical perspective about intuition and it links prior experience to present knowing within the ontological perspective of wholism. Furthermore and more importantly, Brooks' Theory of Intrapersonal

Perceptual Awareness provides a theoretical base for how intuition can be taught.

Studies regarding affective judgment are limited. The affective judgment is important in intrapersonal perceptual awareness theory. The affective judgment is emotional and value laden which may impact clinical decisions. The affective judgment within Brooks' Theory of Intrapersonal Perceptual Awareness provides a framework to integrate an ethical dimension to every decision rather than ethical decisions being considered as an entity of their own. This is consistent with Greipp's (1992) recommendation that ethical decisions should be a part of all practical decisions.

The prominent implications from all of these studies include the need: (a) to consider human differences in decision-making; (b) for nurses to increase their awareness and to consider their own biases, emotions, feelings, and beliefs that may be influencing their decision-making; (c) a wholistic approach that addresses all aspects of clinical decision-making; and (d) for a method of inquiry that allows for a whole person response. Recommendations, from the studies that were discussed in this chapter,

provided the foundation for developing the simulated clinical situation vignette that was used in the current study. The simulated situation is multifaceted, and cues and events (e.g., physical indicators, sociocultural indicators, emotional indicators, assessment status, family dynamics, past medical history and current medical orders) were embedded in the situation to get at nurses' intrapersonal awareness, values, beliefs, and interpretations. The method of inquiry allows for a whole-person response by using structured interview with open-ended (no forced choice) responses.

Brooks' Theory of Intrapersonal Perceptual Awareness is a wholistic approach to clinical decision-making that allows for individual differences. Through the interaction of perception and judgment (that is, intrapersonal perceptual awareness), the sensory analytical, intuitive and affective intrapersonal processes are integrated and, as a whole, impact decision. Tanner (1986) recommended that future research on clinical judgment be directed toward a single theory which describes the development of skill

in clinical judgment (p. 35). Brooks' proposed Theory of Intrapersonal Perceptual Awareness is offered as an answer to this recommendation.

CHAPTER III

Method

Introduction

This study proposed a wholistic nursing theoretical approach to clinical decision-making. Brooks' Theory of Intrapersonal Perceptual Awareness (BTIPA), newly developed for this study, was proposed to examine the interaction of perception and judgment in clinical decision-making of senior baccalaureate student nurses. Although newly developed theories may present a logical relationship of ideas, the ideas are tentative and, prior to deliberative application, should be verified in a design appropriate to the type of theory (Chinn & Kramer, 1991; Fawcett & Downs, 1992). Hence, this study had two purposes.

The first purpose was to clarify, at a descriptive level, BTIPA, by identifying and classifying intrapersonal factors which are integral to decision-making by senior baccalaureate student nurses. The second purpose was to contribute to nursing's knowledge base by extending Imogene King's (1971; 1981) work, through development of BTIPA, and by explicating the concepts of perception, judgment, and decision-making

within the personal system. King alluded to these ideas but failed to develop them in her Interacting Systems Framework.

Design

A descriptive exploratory design using structured interview with open-ended questions was used in this study to explore the intrapersonal clinical decision process of senior baccalaureate student nurses. This design provided an approach for examining the decision process *wholistically*, which is consistent with the central premise of BTIPA.

The researcher interviewed 18 subjects, using a structured interview guide which was theoretically based but articulated in language which was familiar to the subjects. The interview method was deemed most appropriate for this study because it is most frequently used "to obtain factual (as perceived by the respondent) information about the respondent and events, situations, or persons within the respondent's awareness" (Waltz, Strickland, & Lenz, 1991, p. 311). In this study the interview examined the respondent's intrapersonal perceptual awareness in a simulated clinical situation. The structured interview was

developed according to guidelines for developing an interview as outlined in Waltz, Strickland, and Lenz (1991). The suggested procedure included seven steps:

1. Determine the information to be sought.
2. Develop the questions or items.
3. Determine the sequence for the questions.
4. Draft the interview schedule.
5. Pilot-test the interview.
6. Train interviewers.
7. Administer and code the interview. (Waltz, Strickland, & Lenz, 1991, pp. 319-326).

Refer to Appendix B for the structured interview that was used in this study. Each subject was interviewed using the same guide.

Research Question

How do the intrapersonal factors of perceiving, judging, sensing, intuiting, thinking, and feeling contribute to senior baccalaureate student nurses' clinical decision-making?

Sample and Setting

The target population was senior baccalaureate student nurses. There were two criteria which were important to the sample and setting for this study.

One, subjects must have had prior exposure to clinical situations in which they have used nursing process. Two, the baccalaureate program from which subjects were selected must have been accredited by the National League for Nursing.

The sample was a nonprobability convenience sample. While the nonprobability sample limits generalizability, there are strengths: 1) accessibility, and 2) potential to increase population representativeness by obtaining a larger sample size (Brink & Wood, 1988). However, with qualitative exploratory studies, sample size tends to be small because the focus is on in-depth examination of a phenomenon rather than statistical precision (Burns & Grove, 1987; McCracken, 1988; Polit & Hungler, 1991). In this study the focus is on theory clarification and generalizability related to theoretical relevance, rather than extrapolation to larger populations. This means that the concern is with how "the responses can be classified into the [theoretical conceptual] categories" (Brink & Wood, 1988, p. 205) rather than how findings can be generalized to other student populations. Using this type of design there is no

pre-established, specific sample size. According to McCracken (1988) comprehensiveness is more important than quantity and it is better to operate under the principle that "less is more" (p. 17). Brink and Wood (1988) suggest that the sample size, for content analysis and manageability of qualitative data, be "less than twenty" (p.204). King (1981) used a sample size of 17 in early testing of her *Theory of Goal Attainment*. The sample size for this study was 18 senior baccalaureate student nurses.

Access to potential subjects was gained through the cooperation of respective faculty from three baccalaureate nursing programs in southeastern Tennessee. All of these programs were accredited by the National League for Nursing. Subjects were asked to volunteer to participate in the study, and an interview was subsequently arranged at a time and location which was convenient for those subjects who agreed to be interviewed. In this study, the sample was considered homogeneous in that all participants were senior baccalaureate students enrolled in nursing programs in one geographic region. However, the sample included some diversity with regard to age,

experience, previous education, and religion. Diversity within senior baccalaureate students was desirable for clarification of the theory. A brief demographic form was included in the study to describe the sample (refer to Appendix B). In this study, the sample was most diverse in age (range 20 to 46). Religion was also diverse in that 10 religions were identified from the demographic questionnaire. Prior educational background included four nurses with associate degrees, four nurses with diplomas, and 11 subjects with no prior nursing education. Prior health related experience ranged from zero to 13.5 years. There was little ethnic or gender diversity. All but two subjects were female, and all but one were Caucasian. The majority of the subjects were married. Refer to Table 3.1 for summary of demographic characteristics.

Human Subjects

Human subjects approval was obtained from the University of Tennessee-Knoxville (UTK) Institutional Review Board and from the settings where the subjects were recruited (refer to Appendix A). A time to meet

Table 3-1. Demographic Characteristics

Demographics	Number of Participants
<u>AGE</u>	
20	1
21	1
22	3
25	1
27	1
28	1
31	1
32	1
33	1
34	1
42	2
44	2
45	1
46	1
<u>Gender</u>	
Male	2
Female	16
<u>Ethnicity</u>	
Caucasian	17
Black	1
<u>Marital Status</u>	
Single	5
Married	11
Divorced	2

Table 3-1. (continued)

Demographics	Number Participants
<u>Religion</u>	
Seventh-day Adventist	3
Church of God	1
Baptist	6
Episcopalian	1
Catholic	1
Independent/Non-denominational	2
Presbyterian	1
Methodist	1
Evangelical	1
Lutheran	1
<u>Previous Education Before Program Entry</u>	
A.D.	4
Diploma	4
Other	11
<u>Years of Health Related Experience</u>	<u>Years</u>
Range	0 - 13.5
Mean	3.2

with the students and to seek their participation in the study was arranged through faculty at the respective settings. Students were assured that there would be no penalty for refusal to participate in the study. Subjects were informed, orally and in writing, regarding the purpose of the study, the approximate time involved in participation, name of researcher, and telephone numbers where the subjects could contact the researcher.

Subjects were informed that there was no risk to them; that none of their instructors would be told of their participation or see or hear the raw data; that the data would be managed and stored confidentially (refer to subjects' consent form, Appendix A). Subjects were given written and verbal instructions that they had the right to refuse to participate or to withdraw from the study without any impact to themselves or to their educational status. Subjects were invited to verbally respond to a written clinical situation about which their responses were audiotaped. Their responses comprise the data of the study. Students were assured that their responses and the audiotapes would be confidentially maintained, and no

one other than the researcher and committee chair would have access to the audiotapes and raw data.

The researcher transcribed the audiotapes verbatim at which time the identification numbers were transcribed to the data. Each transcript was verified for transcription accuracy by listening to the audiotapes and comparing the transcripts.

To insure confidentiality, no name was attached to any data. Only identification numbers were assigned to each subject, demographic sheet, corresponding audiotape, and the transcribed data. Only the researcher was able to identify the subjects on audiotape. The matching identification numbers were accessible only to the researcher and dissertation chair and were maintained in a locked file, in the UTK College of Nursing Research Center, with the transcribed audiotapes until the completion of the project. The written consent forms will be maintained in the UTK College of Nursing Research Center for three years from project completion, and then will be shredded. Subjects were assured that all data would be summarized for any presentations or publications that arise from the research and no reference to their

identity would be made. They were informed that at the completion of the research project the audiotapes will be destroyed, by cutting and removing the tapes from the microcassette, so that no person can later access and recognize voices on tape. However, subjects were informed that the audiotaped transcripts, with only the identification numbers, will be kept by the researcher for potential secondary analysis at a later date. Subjects were asked to sign a written consent to participate, at which time each subject was assigned an identification number and received an identical copy of the consent form to keep.

Instrumentation

A written simulated clinical situation vignette and the structured interview with open-ended questions comprised the measurement instrument for this study (refer to Appendix B). A simulated situation vignette may be presented by either written or videotape format. A limitation of both formats is their artificiality (DeYoung, 1990; Lanza & Carifio, 1990; Polit & Hungler, 1991). A major advantage of the written format is its cost-effectiveness and versatility (DeYoung, 1990). Whereas the videotape is expensive, it does make it

possible to expose students to audio and visual sensory stimulation (DeYoung, 1990). The researcher reviewed numerous commercially prepared videotapes prior to selecting the vignette format for presenting clinical data to the study participants. Limitations of commercially prepared videotapes include: (a) simulated situations tended to focus on particulars (e.g., a patient with congestive heart failure or the patient with pain), and (b) most simulations were fragmented (e.g., interactive) by presenting information in pieces, thus failing to present situations as a whole. A whole situation approach was essential for this study.

The written vignette allowed for the whole situation approach and was used in this study. Previous studies, that were discussed Chapter 2, provided the basis for developing the vignette that was used in this study. The vignette sought to get at the whole-person processes (e.g., sensory, feeling, intuition, beliefs, biases) in clinical decision-making by embedding various simulated patient cues and events within a whole situation. The simulated clinical situation vignette depicted a patient, a young Italian

man, who suffered injuries (e.g., pneumothorax, laceration, bruises) in an auto accident in which he was the driver. Within the simulation, the patient's friend had been killed in the accident, and the family did not want the patient told about friend's death. Past medical history of the patient (e.g., a gunshot wound), a brief social history (e.g., previous marijuana user), physical description of assessment status (e.g., vital signs, complains of severe pain, chest tube, hands trembling), as well as the medical orders were also included. The vignette is shown in appendix B.

Validity of the vignette was established by having six expert judges evaluate the vignette for realism and appropriateness to senior baccalaureate student nurses. Several changes were suggested by the reviewers and the vignette was revised accordingly. Data regarding time and dosage of the patient's last pain medication was added to the vignette, an extraneous medical order was removed, and clarification of the patient's injury sites were also made. To avoid instrument bias, the interviewer followed the structured interview for each subject. To minimize social desirability, subjects

were reminded that there were no right or wrong answers, and that it was important to the study that subjects were spontaneous in their responses. Additionally, social desirability response bias was minimized by following the interview protocol, giving precise and clear instructions, and by not leading the subjects' responses.

Data Collection Procedure

Subjects were individually interviewed following the structured interview protocol. Upon agreeing to participate, subjects were given the demographic form, the written simulated clinical situation vignette and the structured protocol questions to read. There was no time limit placed on them for reading the situation and when they were ready to respond, the audiotape was turned on to tape the responses. Subjects were allowed to make written notes for their own convenience, prior to audiotaping responses. The rationale for written notes was to allow for individual preferences in responding and thinking. However, the researcher did not collect these notes as part of the data and the notes were destroyed at the close of the interview.

The interview protocol guided the researcher throughout each interview.

Data Analysis

The audiotaped data were transcribed to typewritten form by the researcher and subsequently analyzed by content analysis. Content analysis is useful in inductive and deductive theory-building and theory-testing "wherein theory-based categorical schemes developed before conducting analysis are used to analyze data from subjects or documents" (Waltz, Strickland, & Lenz, 1991, p. 299).

According to Waltz, Strickland, and Lenz (1991) all phases of content analysis are guided by the study's purpose, research questions and hypotheses. The authors outline nine steps for content analysis, which were used to analyze the data from this study. The following section presents the analysis plan for this study as outlined in Waltz, Strickland, & Lenz (1991, pp. 301-307):

Step 1. *Define the universe of content to be studied.*

The universe of content for this study included all of the verbatim, transcribed, audiotaped, semi-structured interview data from subjects in this study.

Step 2. *Identify the characteristics or concepts to be measured.* The concepts that were measured in this study are the concepts from BTIPA: perception, judgment, intrapersonal perceptual awareness, and decision.

Step 3. *Select the unit of analysis to be employed.* The unit of analysis was words, themes, and phrases in the transcribed narratives from the structured interview.

Step 4. *Develop a sampling plan.* This refers to how the universe of the content was be sampled. For example, the sample could be randomly selected 5-minute segments or it could be the entire universe of the content available. In this study, the entire transcribed narratives were analyzed for themes and phrases. Content analysis began with transcribed responses to the first questions in the structured interview and continued through all questions for each entire transcript.

Step 5. *Develop a scheme for categorizing the content.* The categorical scheme for this analysis was developed deductively, in which the categories were established from concepts of the Theory of Intrapersonal Perceptual

Awareness. However, analysis proceeded inductively from the narrative units by classifying content into the theoretical categories. Analysis also allowed for a possible inductive category, in the event that the characteristics which emerged from the analysis could not be classified into theoretical categories as outlined in the categorical scheme (see appendix C). The theoretical definitions and pilot data were used to develop an operational dictionary for coding and classifying the narrative units into various categories (see appendix D for operational dictionary).

Step 6. *Develop explicit coding and scoring instructions.* The narrative units were systematically analyzed according to the categorical scheme and operational dictionary for coding. Key words and phrases were first categorized and coded in the major categories of perception, judgment, intrapersonal perceptual awareness, and decision. They were then classified into the subcategories of sensory perception, intuitive perception, cognitive judgment, and affective judgment, and action. The narrative units were then examined to identify if the response could be attributed to an intrapersonal characteristic

(e.g., value, culture, personal belief, experience, religion), as described in BTIPA. Additionally, each narrative unit was evaluated for any emergent theme (refer to Appendix E for sample transcript analysis).

Step 7. *Pretest the categories and coding instructions.* Three pilot interviews were done and several revisions were made after consultation with the committee chair. Two additional pilot interviews were done, and the revisions were pretested prior to actual data collection.

Step 8. *Train coders and establish an acceptable level of reliability.* This step was applicable if persons other than the researcher would be analyzing data. This researcher did the coding and analysis according to the pre-developed categorical scheme and dictionary. Each interview was systematically analyzed in the same manner. Additional reliability was done by having a colleague, familiar with BTIPA, randomly select three interviews and independently analyze using the pre-developed analysis scheme. Several discrepancies were discussed until there was total agreement and then interviews were reanalyzed following the same system.

Step 9. *Perform the analysis.* In this step the data were coded according to the plan set forth in the previous steps.

Chapter Summary

This chapter has outlined the method and procedure used for data collection and analysis. The descriptive, exploratory design, using content analysis and structured interview with open-ended questions, was deemed most appropriate because it provided a wholistic approach which was germane to the ontological and epistemological perspective of this study. The subsequent chapters will present the data findings and conclusions.

CHAPTER IV

Results

Introduction

The purpose of this study was twofold. The first purpose was to clarify, at a descriptive level, Brooks' Theory of Intrapersonal Perceptual Awareness (BTIPA) by identifying and classifying intrapersonal factors which are integral to decision-making by senior baccalaureate student nurses. Hence, the results focus on theoretical clarification and understanding of the intrapersonal decision process rather than generalizability of findings to other student populations. The second purpose was to contribute to nursing's knowledge base by extending Imogene King's (1971; 1981) work, through the development of BTIPA, which makes perception, judgment and decision-making explicit concepts within the personal system.

There was one research question for this study that addressed the central premise of BTIPA: How do the intrapersonal factors of perceiving, judging, sensing, intuiting, thinking, and feeling contribute to senior baccalaureate student nurses' clinical decision-making? Several existence propositions that are foundational to

the central premise are also examined. A descriptive-exploratory design, using structured interview with open-ended questions, was used to address the research question. The interview questions were theoretically derived, written in language that was familiar to the students, and sought to address propositions which were foundational to the central premise of BTIPA.

Each subject's interview was taperecorded and transcribed verbatim into typewritten narrative units. Content analysis, according to Waltz, Strickland, and Lenz (1991), was the method used to systematically analyze the narrative units according to a pre-developed categorical scheme (shown in Appendix C) and a pre-developed operational dictionary for coding the narrative units (shown in Appendix D). Key words and phrases were first categorized and coded in the major categories of perception, judgment, decision, or intrapersonal perceptual awareness. They were then classified and coded into the subcategories of sensory perception, intuitive perception, cognitive judgment, affective judgment, action, or unknown. The narrative units were then examined to identify whether the response could be attributed to an intrapersonal

characteristic (e.g., value, personal belief, culture, religion, experience) as described in BTIPA. Any narrative that did not fit a pre-defined category was coded "unknown" and when the analysis of each narrative was completed, the narrative was reanalyzed for an emergent theme. An example of the content analysis method, applied to exemplar narratives, is shown in Appendix E.

Results

Perhaps the most striking finding of the whole study is that no two subjects viewed the simulated clinical situation in the same manner. This means that because of the whole-person experience, responses were uniquely individualized; themes from the responses to one particular interview question also permeated other units or categories throughout the same interview. Although each of the narrative units was analyzed and content was classified separately, it was impossible to isolate the responses within any single meaningful category by considering only one narrative unit (i.e., subsection of transcript created by interview questions) without considering the context of the whole (i.e., entire interview transcript).

Although the interview questions sought to elicit the particulars in BTIPA, by addressing supporting propositions which exist within the theory, the responses did not occur in any particular, compartmentalized order that would enable describing results in composite lists. That is, they occurred interactively, in a non-linear manner, in which all or most of the intrapersonal characteristics were identified, regardless of the particular question. Therefore, to isolate a single list of responses as exemplar results, in a composite list from all subjects, without looking at the interrelationship of the whole, is inconsistent with the wholistic perspective of this study. In the Gestalt view, as described in BTIPA, the whole experience is important. That is, sensory perception, intuitive perception, cognitive judgment, and affective judgment cannot be viewed separately, because they are interrelated in the whole intrapersonal experience.

The results suggest that the interrelationship of perception and judgment (that is, Intrapersonal Perceptual Awareness) occurs through the intrapersonal characteristics of one's self. This means that it is

actually the interaction of all of these characteristics within the person that makes perception and judgment interactive or "whole" in the intrapersonal perceptual awareness process. All responses had one common intrapersonal characteristic that was not pre-identified in BTIPA; that is, personal knowing or understanding the situation from the perspective of the subject's own unique self. This perspective varied among subjects. For example, one subject understood the simulated situation to be an ethical one:

... it is an ethical situation because we do seem to apply our standards of living a lot of times on the patients that we take care of...

Another subject understood the patient in simulated situation to be culturally different from self:

... he is different race, different culture so he may respond differently than someone of my own culture might...

In the next exemplar, a subject's understanding was permeated by an emotional feeling about not telling the patient about his friend's death:

... I'm kind of upset because they're keeping the death of his friend from him... not telling him about it... [and] it's also sad because he doesn't know that his friend is dead... [and] I think he needs a lot of support there...

In one final example, a subject added her own beliefs to her understanding of the whole situation:

... we have a man who is in pain from injuries that he has received and seems to be in some mental pain from not knowing about his friend. [He] may be suffering a little guilt from what's happened...

A summary of the subjects' responses, which demonstrates how the perspectives varied, is shown in Appendix F.

Although one could argue that all intrapersonal characteristics could be categorized as personal or experiential, for the purpose of theory clarification the intrapersonal characteristics were grouped and

categorized according to the most salient intrapersonal factor. A list of the categories of intrapersonal characteristics, which were identified and categorized in this study, is shown in Figure 5.

Experience was the salient intrapersonal characteristic and this was subcategorized as prior work and/or clinical experience, personal experience, and lack of experience. Other intrapersonal characteristics which were also identified and categorized included personal values and beliefs, personal preference related to self, personal belief regarding pain, sources of intrapersonal knowledge, cultural and socioeconomic, religion, and personal knowledge or knowing. These characteristics did not emerge in isolation; that is, more than one characteristic emerged throughout an interview narrative. While one characteristic tended to be salient in a narrative, other characteristics were also identified within the same narrative. In the following section, each of the intrapersonal categories that were identified in this study, are presented with narrative examples to demonstrate these characteristics.

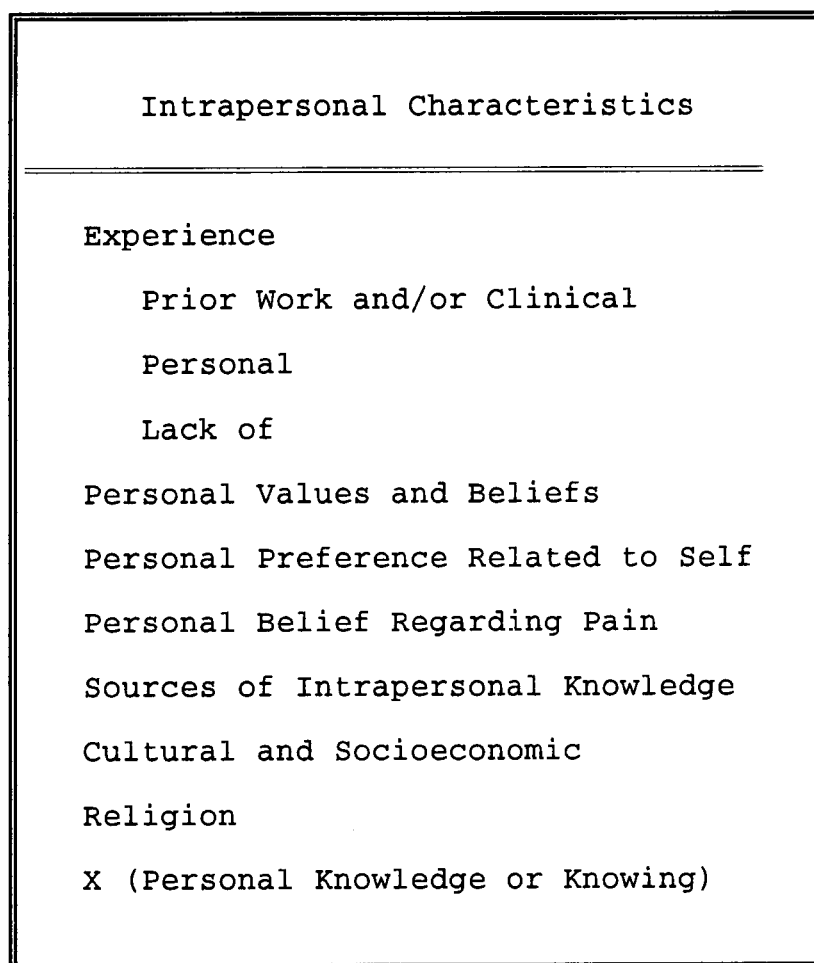


Figure 5. Categories of intrapersonal characteristics which were identified in this study.

Prior Work and/or Clinical Experience

The most salient intrapersonal characteristic which contributed to the subjects' intrapersonal awareness was experience. Previous work experience or clinical experience was the most frequently identified type of experience. In the following exemplar the subject's experience in working as an emergency medical technician (EMT) and personal experience regarding alcohol and drugs permeated the decision process:

This is a typical EMT type of situation or at least I'm familiar with the pre-hospital care part of it until we take him to the ER... This man probably has more problems than meets the eye - like possible HIV and he may have a drug problem he's not admitting to or something.... I feel he needs to be told about [friend's] death since he's in stable condition and the appropriate person to tell him is in question.... but I feel he needs to be told because not knowing is a lot of times worse than knowing. The bad news for me not knowing at all is worse.... What jumps out at me is maybe he's addicted to narcotics because if... these drugs aren't relieving his pain... it said in here that he doesn't do any heavy stuff or IV drugs but I really don't believe that... I was a youth counselor... at a volunteer agency where we handled drug overdoses... and

a lot these people had a hard time admitting that they took drugs... and I had a [personal experience with] an alcoholic... so I know there's a lot of denial in this area.

The same subject's EMT experience was also an intrapersonal characteristic that permeated her response to the researcher's question regarding the first thing she would do for the client:

Airway, breathing, circulation - he's breathing, then check his circulation, and then the LOC. If he answers appropriately [and if he's] oriented to person, place and time... then I would monitor for infection, IV site and go through all the physical things before dealing with the psychological.

Other subjects described experience with patients in prior clinical situations as they related to the simulated clinical situation. Although prior experience with patients was salient, personal beliefs were also identified. In the following six exemplars, both patient experiences and personal beliefs regarding pain and pain control were the intrapersonal characteristics that emerged. The following example

illustrates a subject interrelating previous experiences, pertinent to the patient in the simulated situation, with beliefs about pain:

...I worked on a neuro floor for awhile so... I guess I tend to be a little more tuned into neuro than cardiac. I worked nights so we did have a lot of people coming in with head injuries and the like from automobile accidents. And I specifically thought about two brothers, who left a rehearsal dinner and went drinking and came in and they were in two separate rooms - one [brother] was in much worse shape than the other and the family didn't want either one to know how the other one was doing - it sort of reminded me of that situation... I don't think anybody should be in pain, but, then again, I don't think they should be able to abuse the system.

This subject interrelated two previous experiences with patients to understanding the simulated patient situation to belief about pain control:

I had a patient who was in ICU and he was intubated and he was on lots of Ativan because he had wrecked while drinking and... while being under the influence. And [he] had gone to jail and went into DTs and they had him in ICU. I thought about him. And his record had

indicated that he had been arrested before.... I also had a chest tube patient and when he got to a point... and he was taking some Tylenol or something for it... and then I went in there and he was really... uhm... he was leaning over and, you know, holding himself just like this guy, Joe was. And he couldn't even talk to me; and he didn't want to talk to me; and so there was nothing that... that was gonna go past... that was gonna go beyond his pain. So nothing was gonna happen between us in building a relationship until... he had some pain control.

The next subject relates prior experience from psychiatric patients with beliefs about the simulated patient's behavior:

... I work on a psychiatric floor so I tend to uhm... see a lot that have had this type of behavior in that... it's... I would tend to think he thinks he's immortal to an extent. So I... I have a lot of patients on my floor that get that way whether uhm... self-inflicted or... you know, they do it on purpose or it just happens to happen. So....

The following subject related globally to more than one situation:

Had similar situations in the past and they all kind of vary to some degree. One of the big problems is trying to coordinate when you are going to tell the patient that their best friend, or their family member, has passed away. It's usually best to have the family in the room at that time... I [also] thought about maybe a lot of times people come in and claim to have never used drugs or alcohol or what they admitted to was very limited and then the reports come back and show that they're substantially abusing numerous drugs or the levels are much higher than they've indicated they had taken. So... a lot of times I get the feeling people underestimate their actual consumption.

The following subject draws from previous experience of having cared for "alcoholic patients" in relating to the simulated situation:

I really haven't personally encountered any other situations that are similar to this in my clinical situations... [but] I have cared for alcoholic patients, uhm... with like pancreatitis and uh... it's kinda sad because they do have a lot of pain. Uhm... but a lot... you know, you realize they are bringing that pain on themselves and you wonder with that amount of pain... and they know... how it feels, why they keep continuing to do that and end up back in the hospital with you

treating the same type of... uhm... symptoms and diseases.

In the next exemplar, the subject describes experiences with "indigent patients" and opinions about giving pain medication:

I had several patients on... an indigent patient floor... that were similar to what's described here, with that kind of history, with that kind of past. A lot of nurses were very opinionated on pain medication for these kind of people. And I guess that's the first thing that came to mind. Uh... I'd want to get to know the patient, you know, because my own judgments about pain medication for indigent people who are... tend to abuse the system. Uh... that bothers me some... so I wouldn't withhold the pain medication if it were necessary, if he needed it. So I guess that's why I'd get to know him first.

Personal Experience

Personal experience was the second subcategory of experience that was identified. Several subjects described personal experiences, in relation to themselves or family, that came to mind as they related

to the patient in the simulated situation. One subject described her own experience with pain:

*I thought about being in the hospital myself and when you're in pain... and sometimes I think that ah... when they say you rate pain on a scale from one to five and five is the worst pain... And Mr. uhm... Scorilla has chosen that as his worst pain he's ever had. I think a lot of the... uhm.. caregivers should realize that, it may not be the worst pain that **anybody's** ever had, but if it's the worst pain that **he's** ever had, [then] it should be treated maximally. Because to him it's the worst pain that has ever happened and it needs to be deterred in some kind of way... I think of being in the hospital and in pain... and when you tell them that you're in pain... and they look at you real funny and they... "well, are you hurting real bad? or are you hurting just a little bit? or can you wait for some more medicine?" And you just kinda get this empty feeling like "well, how long am I supposed to wait? and I don't know how long I can wait, and I don't know how long I can take this pain." So... I think it [pain] should be looked into thoroughly.*

In the following exemplar a subject's awareness included a situation concerning a family friend:

... you can't help but going back and thinking was this [an] alcohol or drug accident. And my mother had a friend who got hit by a drunk driver and [it] killed her husband and she was in a coma for a awhile and then she finally came out, and she's fine now. So... it just makes you realize the detrimental effects of... of what drugs and alcohol can do...

In the next exemplar three intrapersonal characteristics permeate the narrative. The subject related personal, cultural and socioeconomic experiences in her intrapersonal perceptual awareness regarding the patient in the simulated situation:

I feel sad. I feel sorry. Uhm... I'm wondering about the drug use is my concern right now. I'm thinking there are a lot of things I could be influenced by... like he's Italian, he's unemployed, he's divorced. I know better than that so... that's why I know I see those things in there but I don't put any weight on them at all... I think our first impressions would be: he's unemployed; he's a young guy; he's out drinking. But I don't do that because I have my own beliefs. I know what I believe; I know where I'm coming from; but I've got to look through his eyes.... He needs somebody to listen to him because I feel he's not telling the truth.

And so I think he needs someone to listen to him. I would give him something for pain. **EB: Can you describe more what you mean by what you say that you feel like he's not telling the whole truth?** Well, his trembling hand; his pulse is increased above what it should be; he said he's used marijuana some but nothing heavy or anything like that; and, for some reason I've got a tendency not to believe that. I don't know why I just... I think they deny it themselves.... the situations I've encountered before is why I think that way, you know, the personal things... 'cause like my husband had done marijuana before and he would never have called himself a drug addict or anything like that. But he would get so much into it that he'd have the bloodshot eyes and he would be oblivious to most everything that would go on. So that's why I think that the first they deny themselves something like that... get very involved with my patients... uhm... I can relate to the patients, [that] is what I do. You know, like the unemployed; my husband was unemployed and you know how people respond to you. You know they look down at you and stuff like this... so I try not to do that with other people. That's why I'm not gonna look at him and prejudge him....

Lack of Experience

Lack of experience (or not knowing what to do) was another characteristic in the intrapersonal awareness

of several subjects. In the first exemplar the subject was not sure if she should be the one to tell the patient about his friend's death:

He has lost his friend and no one has told him about that, so that really worried me because deep down he probably knows something is going wrong... uhm... I'm kind of uncomfortable with the fact that no one has told him yet. And I'm not sure if I should be the one to tell him, so I need to think about and work through about... uhm... working with him... Uh... maybe thinking about social services or talking to doctors and getting this worked through because he probably knows something is going wrong.

In the next exemplar the subject is also concerned about possibly having to tell the patient about friend's death and would probably avoid the topic for lack of knowing what to do:

.... with his friend Mike, you know, knowing that he had been lied to and he thinks Mike is still in ICU. I don't know how I could continue telling him that... if he asked or whatever... I don't know how I would tell him what was going on.... The first thing that I would do would be to relieve his pain... I would probably talk

to him and see how he was doing emotionally.... I would try not to mention Mike, I don't know how I would do that. But I know it probably shouldn't be avoided but I don't know how I would handle it. So I would probably avoid the topic.... Uhm... or maybe, you know, see if I could go ahead and tell him the truth, since he's in a stable condition...

In the next exemplar, the subject is questioning the patient's real pain because of a lack of knowing "how painful having a chest tube is":

I have to question his... his real pain... if he's... I don't know a lot about chest tubes. I don't know how painful having a chest tube is. I guess, having a pneumothorax is pretty painful. But it concerns me when I don't see his blood pressure up but he says he's in horrible pain. His... all his vital signs seem fine... and I'm thinking, does he have a problem other than...? He's been at a party... you know, he's obviously somebody who has a bit of a history. And I would have to question that. That's kind of what pops out at me-- just to question his character a little bit, to uh... see if we're really addressing his needs.

Another subject does not know how to reduce the patient's pain or to tell the patient about his friend's death:

...so I guess my goal would be to uhm reduce his pain, and also to address this need with his friend. Uhm... I don't know how I would do it. I would probably consult with some of my co-workers. So my goal would be to deal with those two things that seem to be bothering him. Uhm... I wouldn't deal with anything at this point like his alcohol use. I mean... it says his slightly trembling right hand; I don't know if that's from his... uhm being off alcohol. I mean, if he's truly an alcoholic, you know, he could have the tremors. And if that's the case, I mean maybe that needs to be looked into as well. You know, I know that they prescribe, you know, alcohol for patients, I don't know... but I wouldn't address as far as uhm... any type of uhm... rehabilitation, for... now... but the.. goals that I think... that I would meet is, you know, dealing with his pain and dealing with his questions about his friend.

In the next exemplar the subject describes not having personally experienced a friend's death as a reason for not knowing the best way to tell the patient about his friend's death:

... I've already kind of told you about his relationship with Mike and how I could handle telling him about the death of his close friend. I haven't had any close friends die, so I don't know how the best way to approach that situation would be... I don't know, I might seek counsel from somebody who had experience or something...

Similarly, the following subject describes lack of clinical experience as reason for not knowing how to answer the patient about the friend's death:

... I'm wondering why we haven't told him that his friend is dead... I don't know who decided that. And it would be difficult for me to lie to him. You know, if he asked me, and I were his nurse, unless I had direct orders not to, and if he had... if there was some reason why, you know what I'm saying?... [unless] if someone said "hey, you know, you shouldn't tell him this," you know, I would be inclined to tell. I don't know, I've never been in a situation like that, in a hospital as a nurse.. or as a nursing student, so...

In the following two exemplars there is an indecisiveness that permeates the narratives. In the first narrative the subject was initially decisive in

actions toward the client, but lack of experience became apparent when, upon reflection, she was in a dilemma about administering or not administering the pain medication. She even seeks reassurance from the interviewer:

...he needs pain relief - that's what he's asking for... he's been asking for something for pain relief for awhile. So right now he needs pain relief. That's his immediate need... But he had two Tylenol #3 which may suggest that... since he's not getting good pain relief for that... you know his drug use may have been a little more than he told us about... but I'd go ahead and give him the pain relief if it were up to me... and I've got a choice here, you know, and I'd probably go ahead and give him the Demerol. [The first thing that I would do] is give him pain relief. You know, whether he has history of abuse or not, if he perceives pain as pain - it's painful, you know. So the first thing I would do is make sure his pain was relieved. We can answer the other questions later... I would continue to observe him for maybe signs of a worsening neurological status... if he does have a subdural hematoma, maybe there's a gradual worsening, you know... It may be a good idea, now that I think about it, to withhold pain medication until we've had a chance to observe him. So... what do you think...? Now that I think about that... That's basically it. Now that I think about it, maybe I would hold pain medication until we had a chance to observe longer... I

think we should observe him. And if he's in a state of altered consciousness, it would be hard to detect any kind of injury. But he does need pain relief too - pneumothorax... Did I fail?...

In this second narrative the subject is not sure about what pain medicine to give or if she should give anything:

The first thing that comes to my mind is uhm... I guess the last thing I read about pain medication. Uhm... I guess I'm trying to decide what to give him, if anything. That's kinda the first thing that comes to mind right now.... Right now I'd try to make him comfortable. Uhm... I guess... uh... give him something for his pain and just assess him... Uh... that's probably what I'd do first...

Personal Values and Beliefs

The second most prominent intrapersonal characteristic that emerged was related to personal values and beliefs. These characteristics were apparent in intrapersonal interpretations of information regarding the simulated situation. Personal beliefs were particularly salient in the

intuitive and affective categories of perception and judgment. Subjects frequently related to themselves and what their own preferences would be in certain situations. For example, in the next exemplar being truthful is salient for this subject:

... what bothers me is I don't see why just because his family doesn't want him to be told at this point. I think he needs to know the truth. I don't like hiding things from a patient. And if my patient needs something, if they ask me a question, I want to give them the truth. I don't believe in dilly-dallying around about it so I'd tell him the truth.

In the following exemplar, a subject values honesty, and the subject's personal beliefs about the simulated patient's behavior are salient:

I think the biggest thing is that I'm being asked to lie to Joe about his friend being dead; and... I think also that if Joe doesn't change some things that he's doing that he's going to end up dead like his friend; and that he's in pain.... I think he definitely needs some pain control and... he also needs someone to talk to about what's been going on. And possibly if he does have a substance abuse problem - I guess maybe substance abuse

is always a problem. But he needs from me direct questions and a place to give or someone to give honest answers that will possibly make him realize what... why he's where he is...

In the following exemplar the subject's personal beliefs and lack of knowing what to do in regards to the patient permeate the narrative. The beliefs are so salient that the subject is concerned about herself:

He's got a rough history... I guess I'd want to get to know his personality a little more. From history, I think he'd be kind of a rough guy who'd you know... I don't know he'd... I guess I'd just kinda get a feeling how he'd take the information [about friend's death] - what he'd do with it: is he gonna be so distraught that he pulls his IV out and jumps out the window? Or is he going to... you know, go into a deep depression and commit suicide? You know, what's he gonna do? Am I gonna have a further problem on my hands with him as a patient by telling him the information, or am I going to.. you know?... **I guess I kinda wonder what trouble I'm gonna get myself into by telling him.** And is it my duty to tell him? You know, what do I say? If it's not my duty to tell him them, you know, who should and how am I supposed to support those people? I don't really have a decision.

Personal Preference Related to Self

Another prominent intrapersonal characteristic that emerged was **self-preference** as related to the simulated situation. Subjects described their own preferences in approaching the situation or what they would prefer to have done to themselves if they were the patient. In the following exemplars subjects' self-preferences are explicitly stated. This subject believes the patient should be told about friend's death and relates to self if "bad news" was withheld from her:

... I feel he needs to be told [about friend's death] because not knowing is a lot of times worse than knowing. The bad news for me not knowing at all is worse.

The following subject stated that the patient's hair had been shaved off and described being personally uncomfortable if she would have to have her hair shaved off:

... he's in pain obviously, he's had some hair shaved.
I know that could be... I would feel uncomfortable if I
had some of my hair shaved off...

The next subject describes wanting to treat the patient
in the same manner that she would like to be treated:

I would like to develop a trusting relationship with him
so that he would feel like what he needed he could ask
from me. Do you know what I mean? I think that's what
I try to do when I'm on the floor; I try to elicit trust
and try to observe and so they feel like whatever they
need, they can ask me for it. Maybe that's a lazy way
out, I don't know, that's just the way I want to be
treated. I want 'em to treat me like if I need
something, I can ask you for it... or and I guess I try
to treat people like that. I don't know if that's good
or not, but that's... I find myself doing that as I
uhm... care for patients.

In the next exemplar the subject prefers psychological
focus over a medical focus:

... He seems to have a lot of problems going on with
him, with the drug use, possible alcohol, and this
gunshot five years ago, the multiple sex partners.
There's something... there's something else that's going

on with him besides this. I don't think... nurses tend to just look at the medical problems and don't tend to look at the psychological problems and I'm just real big on that.

In contrast, the next three exemplars prefer physical focus over a psychological focus. In the first exemplar, the subject describes pain relief as foremost followed by social and spiritual concerns:

... first and foremost, pain relief, would be what I would provide for him most of all. Secondly, I think that, in the long range of plans and goals for him, is... probably some counseling for him because he's gonna have a lot to deal with. ...[and] also with his lifestyle and the things stated in his records, it looks like he would need to have some social help, and some spiritual help as well...

The second subject also describes physical pain relief first and in long range plans would deal with social and spiritual concerns:

... first of all, you think of physical... his physical pain and pneumothorax... so I would definitely medicate

him for pain and then look into long range plans as far as social and spiritual help...

The third exemplar would also monitor all physical things before psychological:

... I would monitor for infection, IV site and go through all the physical things before dealing with the psychological...

In the final exemplar the subject relates to self in understanding the patient:

... what struck me was that... he's about my age, you know, so I can kind of understand somebody, I guess that age; and he's divorced and I'm divorced, so I can relate to that... Initially I wanted to be judgmental about his drinking and stuff like that; and, I'm not saying I've never drank and drove... it's just that he had consequences related to it and... I've never had such consequences...

Personal Belief Regarding Pain

In several exemplars, subjects' beliefs about what pain should be like were salient in their responses regarding the simulated situation. Subjects were

looking for things that fit their beliefs about pain, particularly vital signs and pain. In the following exemplar the subject states that the simulated patient's "vital signs don't seem consistent with someone who's in pain" and then describes her personal expectations of what vital signs would be consistent with pain:

...his big problem is pneumothorax. Right now he's asking for pain relief... uh... but his vital signs don't seem consistent with someone who's in pain, and [he] has adequate tissue perfusion and everything else... He's had a couple of Tylenol #3. He rates his pain as a five and he seems to ask for pain medication a lot. EB: can you describe a little bit what you mean by vital signs aren't consistent with his pain...? Well, his temperature is normal, it's not elevated; his pulse 92 - that could be seen as a little elevated; ah... respirations are 20 and regular; and his blood pressure is normal - it's not elevated. So we would expect one who is experiencing pain uh.. to have uh... elevated vital signs: of an increased blood pressure, increased pulse rate- he's 32 years old - [a pulse of] 92, I don't think is out of whack for that. He did have some Tylenol #3, which has a little codeine, that would tend to depress respirations and may effect that a little bit.. oh, the one thing that might indicate pain... is

the guarding behavior... I mean that's certainly consistent with pain...

For the next subject, an elevated blood pressure would be consistent with pain:

... I guess having a pneumothorax is pretty painful, I guess. But... it concerns me when I don't see his blood pressure up but he says he's in horrible pain. His... his... all his vital signs seem fine, and I'm thinking, does he have a problem other than?...

Sources of Intrapersonal Knowledge

While education is one of the intrapersonal characteristics that was pre-identified in BTIPA, a surprisingly rare occurrence in the data was explicit reference to education as a source of knowledge or rationale in the intrapersonal perceptual awareness process. Only six exemplars for sources of knowledge were explicitly identified and include classroom, lecture, radio broadcasts and prior education. The following subject related to something "just learned in class":

... his neurological status is stable, but since he's had a concussion, from what we've just learned in class, he may not stay stable necessarily...

The next subject globally relates to having been taught about giving pain medication:

... the thing about reducing pain is... ah... if you reduce it before it gets to the optimal level that they cannot stand, it's harder to reduce it then. And if you kind of... uhm... avoid the highest level of pain - the first pain. Uh... you know, we've been taught like when it's time for pain medicine, don't wait for them to ask you...

In the next exemplar, the subject relates prior psychology degree as reason for "tending to look away from the medical":

... I'd like to know how long it's been since he has been in ICU, but I tend to look away from the medical. I guess my psychology degree makes me do that...

This subject identifies lecture as the source of knowing:

... I see where he has Demerol that he could be given and he wasn't given that in ICU and I wonder why. And I'm thinking, that if I were the nurse, I'd probably give it to him, if he's in pain - **especially after what we just heard in lecture** in that you want to, you know, get their pain under control so that they'll breathe better, 'cause he's got the pneumothorax, 'cause he's splinting; he's probably not taking very deep breaths; but, that's my initial impression....

The next subject identifies source of knowledge as a radio broadcast she had heard on the way to school:

... I would be curious as to if he's HIV positive. He's had multiple sex partners and he's 32 and that seems to be the age in which... I don't know how long he's had multiple sex partners... you know, probably while he was married, and that's probably why he's divorced!... From what I'm hearing in the reports in that uh... people who were promiscuous in their younger years are becoming HIV positive in around this age; **that's what I heard on the radio coming to school last week - on the news.** And that HIV is on the rise for this age group as far as I think she [radio person] said forty-something years old....

This subject is not sure of the source of knowledge but thinks she read it when she was studying for her leadership class:

... I would give him the pain medication... [and] if it were towards the end of my shift, I'd just address you know what I could right then and make him comfortable. And then possibly pass that along to the next shift... as far as what my plan had been, you know... I think that something I read... where was it?... in studying, I guess, probably... studying for one of my classes... for my leadership class... uhm... and I just it's a little blip in my brain... uhm... but that there's uhm... a certain type of care... uhm... whereby one nurse would be responsible for the care of patients and she would determine the plan of care and that each nurse would continue that plan of care as the shifts go on....

Cultural and Socioeconomic

Cultural and socioeconomic characteristics were pre-identified in BTIPA as contributing to intrapersonal perceptual awareness. Beliefs about lifestyle were most salient in the following four exemplars. The first exemplar illustrates a subject's beliefs about lifestyle of the patient as being different than most nurses:

I was thinking this is more of an ethical situation because we do seem to apply our standards to living a lot of times on the patients that we take care of. And.. he has a lifestyle that is not always the same as what a lot of nurses are... what I noticed.. was his lifestyle, and uhm.. you know, they gave him an alcohol and drug screen test... and one of the things that I noticed [was] that there were no results given of the test. So as the reader, you don't really know if he was legally... uh... his blood alcohol was too high or was it not? Or was he on drugs? It just said that the test was given and I didn't pick up that it gave any result. But with... him saying, you know, that he had admitted using drugs before and that he just come from a party. As a reader, I think, or even as a nurse getting report, a lot of times you would have some animosity towards him, whether you should or shouldn't it's gonna be there I think because... uh... his friend died...

The following narrative illustrates an example of a subject's feeling uncomfortable because of cultural differences:

The first things that jump out... is that first of all... that he is ... uh... different race, different culture, so he may respond to things differently than someone of my own culture might... so I'm not sure how

that relates to him dealing with pain and his situation... The other things that jump out at me is his complaint about pain... So uhm... the history of his culture, the history of the fact that he doesn't know about his friend yet, and his pain, is the things that jump out at me first. So there's a lot of things going on in this situation... I would feel kind of uncomfortable... uh... dealing with him... just because of all the things going on... [Other information that I would seek is] I would probably call the doctor on the [medication]... I would feel more comfortable talking to the doctor... [The first thing that I would do] is probably talk to him for a couple of minutes [and] see if I could get him feeling more confident. And then check his vital signs... and then probably talk to the doctor...

The following two exemplars illustrate how beliefs about lifestyle are imposed into the situation from pieces of factual information obtained from the simulated situation vignette. In the first exemplar the subject identifies the past history of a gunshot wound as indicative of lifestyle the patient may be living:

What jumped out at me was the fact that he is so anxious and uhm... he had a... uhm... gunshot wound in the past

and that kinda tells me a little bit about what type of lifestyle he may be living... maybe not... but uhm... being intoxicated and driving in a car and then having a past history of... uhm... a gunshot wound may say something pertaining to his history...

This subject identifies three fact cues (patient's past history of the gunshot wound, drug use, and sexual behavior) as salient in understanding the patient:

... I would try to develop a relationship with his family... and try to maybe facilitate some family counseling and you know... uh... he has a history of a gunshot wound and that's usually... isn't a very good sign of a lifestyle - someone's coming in with a gunshot wound, kinda says something about them. He's a drug user, he's obviously sexually active, it looks like he might be leading a life that's causing him problems, you know. And his behavior has caused someone's death, possibly. So I think I would pursue those avenues and see what I could help in that area..

Religion

Religious background is considered an intrapersonal characteristic within BTIPA which contributes to one's intrapersonal perceptual

awareness. Religion or spirituality were identified as an intrapersonal factor in the next two exemplars. In the first exemplar, spirituality is implicit in the first exemplar:

... If he says he needs some more pain medicine; then he probably does need more pain medicine. Uhm... I think his spiritual... uhm... innerself is sort of being neglected, because he deserves to know something about what happened to his friend at this point... Uhm... goal for this client is uhm... pain management. Uhm... patient education on safety outside of the hospital. Maybe a history on his alcoholic background, possibly alcoholics anonymous. And some type of self-searching - uhm... why is he taking these risks?... before I would seek a chaplain, I would, of course, ask him his preference, if he wanted to talk to someone.

In the next exemplar, spirituality is explicit:

... I'm more of a minister probably, you know. As far as medicines, I believe first in the healing of their hearts, and their minds, and then their bodies; 'cause drugs, I think are only a crutch in this world. We don't want to get used to using these crutches permanently.

Personal Knowledge

An intrapersonal factor which emerged (that was not pre-identified in BTIPA) was categorized as **personal knowledge or knowing**. In this category, intrapersonal characteristics, such as experience or education, could not be directly identified as contributing to the intrapersonal perceptual awareness process. In initial analysis, these segments of the narratives were coded as "unknown" and when completed they were re-analyzed for themes. The theme that emerged was **knowing**. In knowing the subjects: (1) recognized facts from the simulated situation, and (2) described understanding about the situation that could not be explicitly identified as fact information. Hence, the category was labeled as **personal knowledge**. In a sense, subjects "knew" what to do and "knew" what was expected. Personal knowledge pertained to knowing within each individual self. Inherent in personal knowledge are the intrapersonal characteristics of each person's unique self which interact as information is intrapersonally communicated and interpreted. Personal knowledge was most apparent in subjects' responses regarding goals and actions. This finding is

theoretically consistent, because goals and actions are considered interpersonal rather than intrapersonal. Nursing education is typically focused on interpersonal decisions and actions. Therefore, subjects would be expected to respond interpersonally rather than intrapersonally, and intrapersonal characteristics would not be as evident.

In the category of personal knowledge, knowing what to do, actions, attending to information (e.g., facts from simulated situation) and personal reasoning are all interrelated with beliefs and values. Each subject "knew" the situation differently and "knew" within themselves what to do. The following five examples illustrate the subjects' differences in knowing the situation, facts attended to, reasoning about the facts with opinions and beliefs, and actions they would take. In the following example the facts attended to were client's pain and death of friend. Actions were related to providing pain relief and psychological support if the patient found out about his friend:

... Right now, I think the client needs uhm a lot of support, for his pain, for one thing. And medical support, obviously. I need to take care of his medical needs. Uhm... and if he does find out about Mike... [I need to] take care of his support, you know, psychologically, and socially, with his friends and family. Uhm... be an advocate in that area... I guess my goals would be... uhm... relief from pain. Uhm... and, you know for his medical needs, his wounds, whatever to heal et cetera...

The salient facts for the following subject were the client's pain, last pain medication, vital signs, the patient's memory of the situation, and who should tell the patient about his friend's death:

... he's listing his pain as the worst pain - as number five. It seems to me that... ah... we need to help with that in some way. If he had Tylenol four hours ago, you know, it's either time for that... or some more Demerol 'cause he's asking for relief. Course, the vital signs are very much within normal limits... So I'm just going on his demeanor as far as how anxious I think he is... And too, he doesn't really remember what happened, which is upsetting to people - you know, when they feel like they lost a day out of their life... now... there's

different theories about who should be telling him what happened to his friend...

The next subject attended to the patient's pain and described the actions she would try to do:

What the client needs from me is definitely some pain relief, some pain management. And, of course, he has Codeine ordered and the Demerol. I would try the codeine first and then after, you know, three hours, if that didn't work try the Demerol. But he definitely needs some pain relief....

The subject in the next exemplar identifies the client's pain, pneumothorax, chest tube, and describes actions that she would take related to these:

I guess my goal for this client is basically pain relief and whatever nursing interventions... [such as]... he has a pneumothorax and a chest tube so you want to make sure that's secure, taped and sealed. Make sure that's secure and stays secured. Course you have to monitor the type of drainage that comes out of the chest tube... His respiratory status is pretty stable, so just to continue to monitor that...

In the following example the subject believes the patient's problem is anxiety, identifies chest injury, vital signs and pain as salient fact cues from the situation, and describes nursing actions:

... I would deal with his anxiety. Uhm... monitor his wounds, and his, of course his... do a thorough assessment with his chest injury. But with his respirations normal, his blood pressure and his drainage... and to monitor his drainage on a regular basis... but I think most the most thing I could do as his nurse would be to monitor those things and pain management....

Theory Validation

The central premise of BTIPA proposes that the nurse as a whole, perceiving, judging, sensing, intuiting, thinking, and feeling person makes the decisions in a clinical situation. The results of this study support this premise. All of the intrapersonal characteristics that emerged as contributing to baccalaureate student nurses' intrapersonal perceptual awareness had one factor in common: *self*. This means that *self* is how perception and judgment interact and *self* is why perception and judgment cannot be

separated. It is through the interrelationship of the intrapersonal characteristics of one's self that the nurse, as a whole person, makes the clinical decisions. One exemplar captured the central premise:

... I can relate to the patients is what I do... and like the unemployed; my husband was unemployed and [I] know how people respond to you. You know, they look down on you so... I try not to do that to other people... I've been a missionary [and] I've gotten to go around the world and see people in other situations so I bring all this with me... it's like... some of it's good... you know some you like, you bring with you and to say it's to whatever you become later on in life... I've been through that and my... my brother was in a motorcycle accident once and... he could have gotten killed at that time... so that's how you know, you just bring all these things with you. So I think this young man... he's got problems, you know... I believe in the healing of their hearts, and their minds, and then their bodies...

Two supporting propositions which were foundational to the central premise were also examined. BTIPA proposed that intrapersonal perceptual awareness is the intrapersonal decision-making process, preceding

action, manifested through interaction between perception and judgment and that decision (action) represents the outcome of the intrapersonal awareness process. This is partially supported in that perception and judgment are interactive and occur intrapersonally. However, the results do not support that decision is the outcome of the intrapersonal perceptual awareness process. Instead, there are actually two types of decisions manifested in intrapersonal perceptual awareness: *intrapersonal perceptual awareness decisions* and *interpersonal decisions (actions)*.

The intrapersonal perceptual awareness decisions are the intrapersonal conclusions, interpretations, or *meanings* that occur in the intrapersonal perceptual awareness process. In a sense, intrapersonal conclusions or interpretations are *states* of intrapersonal perceptual awareness that occur in the intrapersonal perceptual awareness *process*. The states (intrapersonal awareness decisions) may or may not be manifested as intended interpersonal decisions (actions). This verifies BTIPA by demonstrating that

the intrapersonal interpretations are nonobservable.
Only interpersonal decisions are observable.

An example of an intrapersonal awareness decision which occurred in the majority of the responses was subjects' intrapersonal interpretation that the patient in the simulated situation was "stable." When subjects were probed to describe how they arrived at that interpretation, the interaction of perception and judgment processes was vividly illustrated. The following exemplars demonstrate this. The subject in the following situation described the vital signs as stable and then described what she knew about vital signs (e.g., temperature, blood pressure, pulse):

... although his vital signs appear stable at this moment but uh.. he just appears to be under stress for a number of reasons. [EB: Can you describe what you mean when you say his vital signs appear to be stable?] ... the parameters all seem to be within normal limits. uh.. his temperature is normal; his pulse is between sixty and a hundred; he's not tachypneic; ah, his blood pressure is stable; he's got good capillary refill; it doesn't look like he's exerting about... doesn't appear to be having shortness of breath, or working at [breathing] or anything like that; neurologically he

seems in tact; he's answering questions, asking questions...

This subject considered the patient neurologically fine and then described what fact cues and what she knew about those cues had led to her interpretation:

... even though he seems fine from right now, neuro-wise, it's good to keep an eye on him; do neuro checks and document any changes... [EB: Can you describe this a little more, what you mean by he seems fine?] ... Well, I mean neuro-wise, it says here... uhm... O.K., his neurological status is stable, but since he's had a concussion, from what we've just learned in class, he may not stay stable necessarily. I mean he's not fine, he's agitated but what I meant was his neuro status was stable... Because he's awake, alert, oriented times three, but he is worried partially over what's happened to Mike; but it might be he's worried about the situation he's in...

In the last example the subject considers the patient medically stable because vital signs are stable:

... because he seems to be stable medically, so I'm more apt to look at the psychological and emotional things that are going on... [EB: Can you describe a little more

what you mean by seems to be stable medically?] ...O.K.,
well, his vital signs seem to be stable, with uh
everything - as far as his pulse, his respirations, his
temperature, his blood pressure, everything... and the
capillary refill seems to be just fine...

BTIPA also proposed that perception had two processes, sensory and intuitive, and judgment had two processes, cognitive and affective, which occur together and increase a nurse's state of awareness of what is occurring in a situation. This is partially supported in the identification of both perception and judgment processes, occurring interactively, rather than in separate isolated units within each subject's narrative. However, the subcategories of intuitive perception and affective judgment were difficult to distinguish as separate processes.

A common theme in the analysis and most salient in the affective and intuitive processes was the emergence of self values, beliefs, and experiences, which were theoretically pre-identified characteristics in both intuition and affective processes. Within BTIPA the intrapersonal characteristics were proposed to affect perception and judgment. Then these characteristics

would also be true for Intrapersonal Perceptual Awareness where perception and judgment are interacting through the intuitive and affective self. Intuitive perception and affective judgment were theoretically distinguished in that, in intuition, there was something added (gaps filled by the person) to the situation from the person; whereas in affective, subjects did not add information to the situation. The following narrative is an example of intuitive perception:

I would have liked to have known what the alcohol and drug screen showed on arrival... it might indicate his dependence on other drugs he didn't admit to...

In this a suspicion or hunch was added to the reasoning from the subject's personal beliefs (self) and therefore, this was categorized as intuitive.

Affective judgment was identified when the subject did not expressly add own hunches but expressed an emotional feeling. The next narrative is an example of affective judgment:

... What was the importance of Mike to Joe? Was he best friend? or how long had he known him? or... just some general questions regarding their friendship.

Although no suspicion was added to the reasoning, the questions asked by the subject are deemed appropriate from the perspective of the subject's personal beliefs and values (one can assume the information sought has value because it is what was attended to or deemed important by the subject). However, one question remains: is it affective or is it intuition?

The following narrative is an example of a subject attending to pieces of sensory information while adding own opinions, beliefs, and values to the situation:

I'd like more of a history on him, to see if there was other problems in the past because of the gunshot wound; that, and just really the alcohol and drug screen. And find out what his family... what is going on with them in his life right now... he seems to have a lot of problems going on with him, with the drug use, possible alcohol, and this gunshot wound five years ago. There's something... there's something else that's going on with him besides this. I don't think... nurses tend to just look at the medical problems and don't tend to look at

the psychological problems and I'm just real big on that.

In one final example, the response began with an affective or emotional feeling and was followed with an intuitive response:

I feel sad. I feel sorry. I'm wondering about the drug use is my concern right now, when I think about it... I believe he's worried about his friend. I think he knows that within himself that there's something wrong, that he's not being told [about friend].

It is possible that one cannot break down the content units enough to classify responses into subcategories because of **self** in the whole person process (or should one even focus on doing so?). Within the philosophy of wholism, in which the whole is more than the sum of the parts, one should not expect to break down the whole and identify all the particulars, because philosophically it would be impossible to do so. Even if one thinks all the particulars are identified, there may be categories or characteristics that one does not know about, because the guiding philosophy says there

is more than the sum of the particulars that have been identified! The particulars are different for different people, so the whole person is different as well; therefore, the intrapersonal outcomes may be also be different.

Self is integral to the whole-person so that the intrapersonal processes of perception and judgment and the intrapersonal characteristics cannot (nor should they) be separated to isolated parts. Self is so integral that this researcher concludes that intuition is the "affective self" of the perception process and affective judgment is the "affective self" of judgment the process. Furthermore, and more importantly, because of self, one cannot separate the processes at all and there are actually four intrapersonal processes of awareness: sensory awareness, cognitive awareness, affective awareness and intuitive awareness. It is actually the interaction of the intrapersonal characteristics within the intrapersonal awareness process that create the whole person experience. In other words, in intrapersonal perceptual awareness, the intrapersonal factors provide the intrapersonal knowledge or foundation for interpersonal decisions in

clinical decision-making. BTIPA is reconceptualized in a wholistic form (refer to Figure 6).

Chapter Summary

This chapter presented the results of this study. The results focused on clarification to BTIPA through identifying and classifying intrapersonal factors which are integral to baccalaureate student nurses' clinical decision making. The most salient intrapersonal characteristic that contributed to the decision process was experience. Other characteristics that were identified were values/beliefs, sociocultural, religion, education, and personal knowledge. The central premise of BTIPA was supported. Several foundational propositions were partially supported. The concepts of BTIPA were clarified and reconceptualized based on the results of this study.

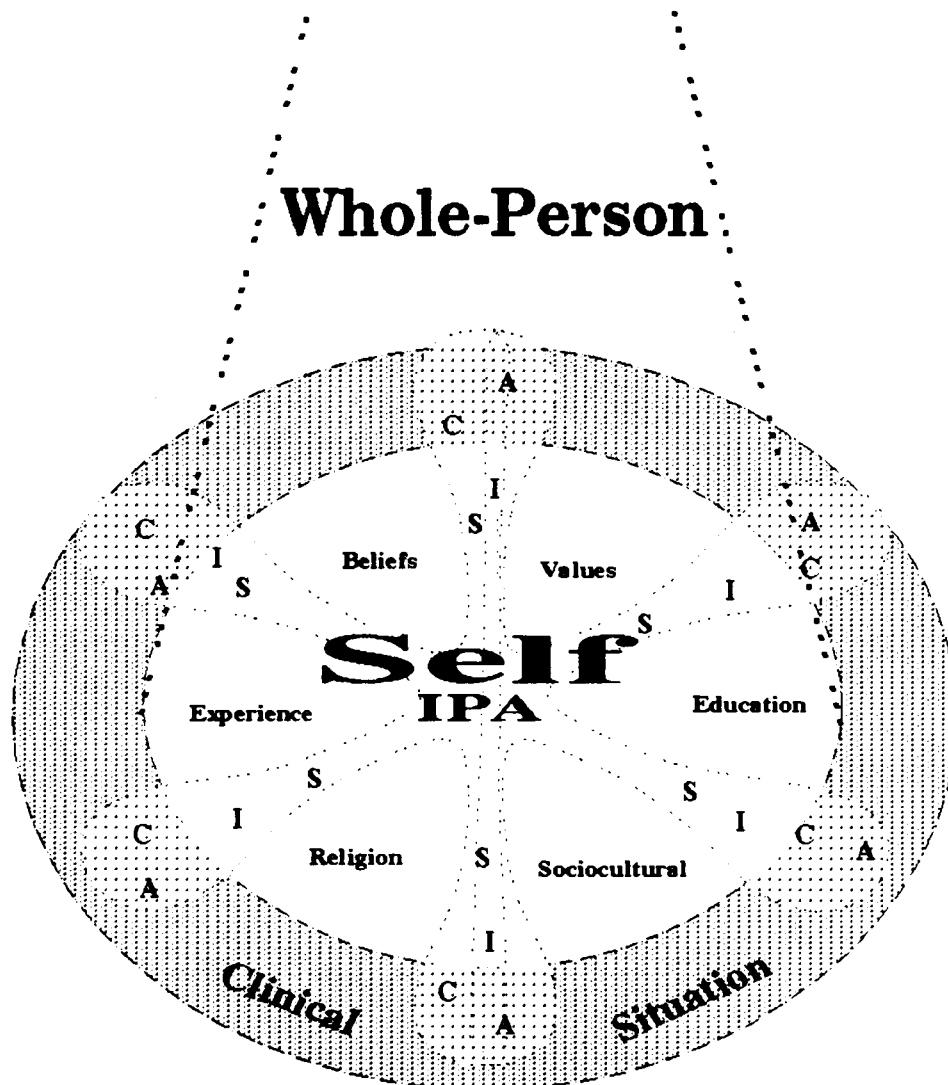


Figure 6. Brooks' Theory of Intrapersonal Perceptual Awareness reconceptualized in wholistic form. The intrapersonal characteristics interact within the intrapersonal processes (sensory, intuitive, cognitive, and affective), through self, which provide the foundation for knowledge in clinical situations.

CHAPTER V

Discussion

Introduction

This study had a twofold purpose: (a) to clarify, at a descriptive level, Brooks' Theory of Intrapersonal Perceptual Awareness (BTIPA) by identifying and classifying factors which are integral to decision-making by senior baccalaureate student nurses, and (b) to contribute to nursing's knowledge base by extending Imogene King's (1971; 1981) work, through the development of BTIPA, which makes perception, judgment and decision-making explicit within the personal system.

This chapter is divided into five sections: (1) theoretical clarification of BTIPA, (2) BTIPA and King, (3) previous literature and BTIPA, (4) implications for nursing, and (5) chapter summary.

Clarification of BTIPA

BTIPA is a midrange theory that was developed for this study from Imogene King's Interacting Systems Framework (1971; 1981). This mid-range theory is the first nursing theory to provide a wholistic approach to teaching and learning clinical decision-making.

Clarification of BTIPA was done through systematic application of a content analysis method (Waltz, Strickland, & Lenz, 1991) to 18 senior baccalaureate student nurses' verbatim narrative responses about a simulated clinical situation vignette. To analyze the narrative content a coding scheme and an operational dictionary were pre-developed from the theoretical definitions of BTIPA, and used to systematically analyze, identify and categorize the content (e.g., words, lines, phrases) of each of the verbatim narratives. The narrative content was first categorized into the four major BTIPA concepts (perception, judgment, intrapersonal perceptual awareness, and decision). The content was then identified and categorized into the subcategories of perception (sensory and intuitive) and judgment (cognitive and affective), intrapersonal perceptual awareness interpretations, and decision (action). The analysis then sought to identify which theoretically pre-defined intrapersonal factors (e.g., experience, education, religion, culture, socioeconomic) contributed to the intrapersonal processes of perception and judgment. If any narrative did not fit

a pre-defined category, it was labeled X for unknown, and when the analysis of each narrative was completed, the narrative was reanalyzed for emergent themes.

BTIPA proposed that the processes of perception and judgment occur within the person in the decision-making process of Intrapersonal Perceptual Awareness. The central premise of BTIPA asserts that the nurse is a whole-person (that is, an intrapersonally thinking, feeling, perceiving, judging, intuiting, sensing, believing, valuing, person) who enters the clinical situation. This central premise was supported and the results provided evidence that the way in which whole-person understanding occurs is through interaction of the intrapersonal characteristics of *self*.

The intrapersonal factors (experience, personal values/beliefs, religion, sociocultural) that were pre-identified in BTIPA and an additional factor that was not pre-identified (personal knowledge) contributed to the intrapersonal processes of perception and judgment. All of the intrapersonal characteristics that were identified in this study had *self* as a common theme. Within BTIPA *self* was assumed to be integral to

intrapersonal perceptual awareness and the whole person experience.

The whole person experience is manifested through intrapersonal perceptual awareness, which is manifested in the interaction of perception and judgment. The interaction of perception and judgment occurs through the interaction of the intrapersonal characteristics of **self**. In other words, the whole person understanding of objects, events or situations (intrapersonally communicated information) occurs through the interaction of the intrapersonal characteristics (e.g., experience, education, beliefs/values, sociocultural) within the person. In this study, the intrapersonal characteristics that contributed to intrapersonal perceptual awareness were experience, personal values/beliefs, cultural, socioeconomic, education, spiritual/religious and personal knowing. The most salient of these characteristics was experience.

BTIPA also proposed that perception had two processes, sensory and intuitive, and judgment had two processes, cognitive and affective, which occur together and increase a nurse's state of awareness. This proposition is partially supported. The findings

support the interaction of perception and judgment. However, one of the problems that existed was separating the intuitive and affective processes in the analysis. It was during identifying and categorizing the affective and intuitive categories that **self** became evident within the intrapersonal characteristics. Perception did not occur separately, and judgment did not occur separately; instead, perception and judgment occurred interactively within the same narrative unit. The common theme that links these characteristics is **self**; that is, the intrapersonal characteristics of **self**.

Self is one of King's (1971; 1981) personal system concepts and within BTIPA **self** was assumed to be integral to intrapersonal perceptual awareness. In BTIPA **self** was not pre-identified as an intrapersonal category but was assumed to be integral in perception and judgment. Because **self** emerged so prominently in this study, this researcher believes that **self** is not a concept of the personal system; instead, **self is** the personal system and this is why a whole-person experience is possible. To continue viewing **self** as an aspect of the personal system, implies that **self** is

separate from the whole, which is philosophically incongruent with *wholism*.

Whereas **self** was originally subsumed in BTIPA, **self** is no longer assumed in BTIPA; instead, **self** is concluded to be the core to intrapersonal perceptual awareness. **Self** is the manner in which intrapersonal characteristics interact; and **self** is the foundation for learning how to make clinical decisions and for teaching students how to make clinical decisions. It is this foundation that educators can develop (and should develop) in preparing students in clinical decision-making. It is through the intrapersonal characteristics that intrapersonal perceptual awareness is developed. Because the intrapersonal characteristics (**self**) permeate the perception and judgment processes (sensory, intuitive, cognitive, and affective) this researcher concludes that these are really four intrapersonal awareness processes that interact as a whole. Therefore, it is actually through **self** that intrapersonal perceptual awareness occurs (interaction of perception and judgment), and it is the interaction of the intrapersonal characteristics through which nurses have the ability to understand

situations as a whole. It is through this interaction that the whole person understanding occurs.

BTIPA and King

The second purpose of this study was to extend Imogene King's (1971; 1981) work by making perception, judgment and decision-making explicit concepts within the personal system. While King (1971; 1981) alludes to these concepts intrapersonally, they are not explicit concepts of the personal system. This researcher concludes that judgment could be made an explicit concept of the personal system but only in interaction with perception. Within King's (1981) current framework, perception and judgment are linearly conceptualized (incongruent with King's stated philosophy of *wholism*), within nursing process, in the interpersonal system. Figure 7 shows how perception and judgment are linearly conceptualized in King. Perception and judgment are concepts that are interrelated through intrapersonal perceptual awareness of **self**. In King's personal system, perception and judgment cannot be viewed separately; instead, they

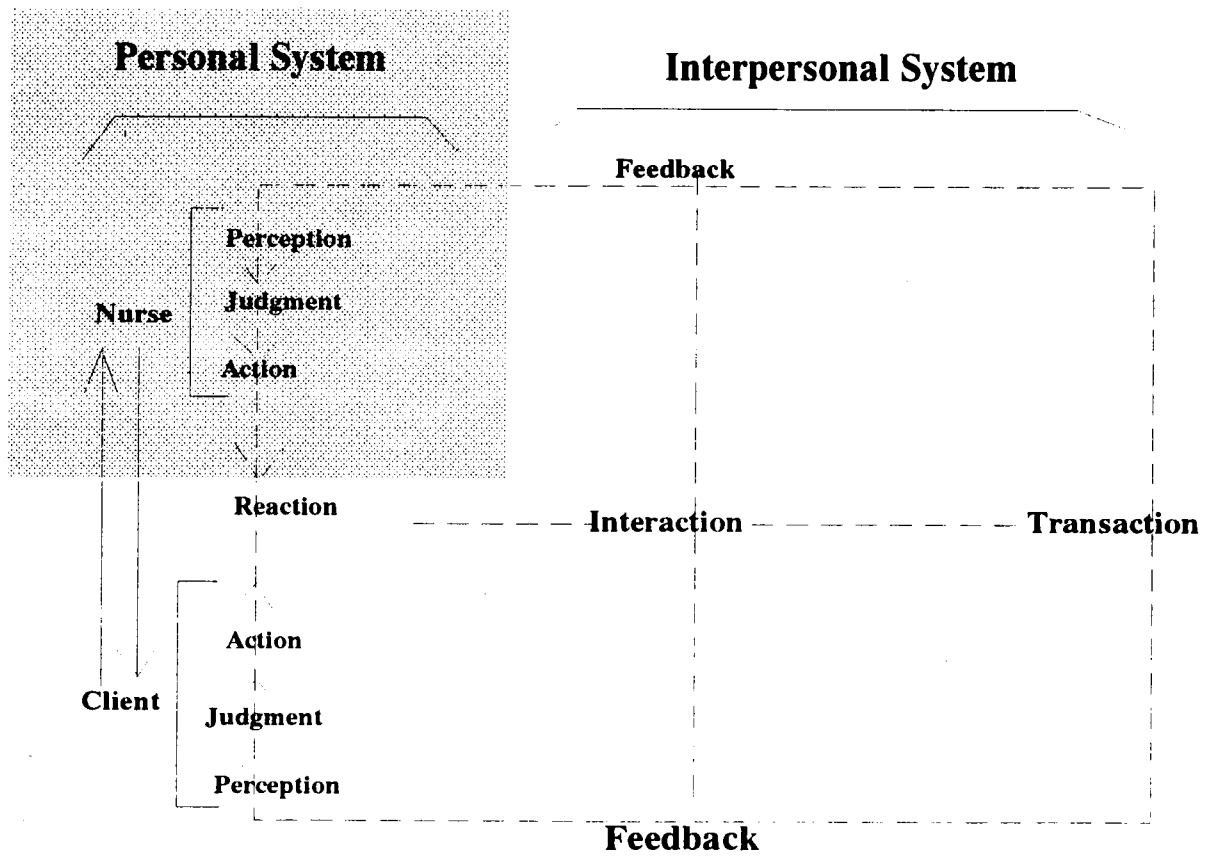


Figure 7. This figure shows how perception and judgment are linearly conceptualized in King. The shaded area represents the student nurse's personal system. This figure was modified from King (1981, p. 61).

must be viewed *wholistically* (i.e., intrapersonal perceptual awareness), because they do not occur separately. Figure 8 shows how perception and judgment are wholistically viewed, as whole-person processes, in BTIPA. Perception and judgment could be brought into King's (1981) personal system through self; but, only if the personal system is viewed as a whole-person. This can be done through a proposed reconceptualization of the personal system in which **Self is the Personal System, interacting as a whole-person**, within the interpersonal system. King's (1981) own work supports a whole-person reconceptualization which is also congruent with her stated philosophy of *wholism*. For example, King (1981) states that person and self are synonymous (p. 27); she also states that "a person is a total system" (p. 10); therefore, **self is the personal system**. Figure 9 illustrates this whole-person reconceptualization of the personal system in which **Self is the Personal System** and demonstrates how perception and judgment cannot be separately viewed.

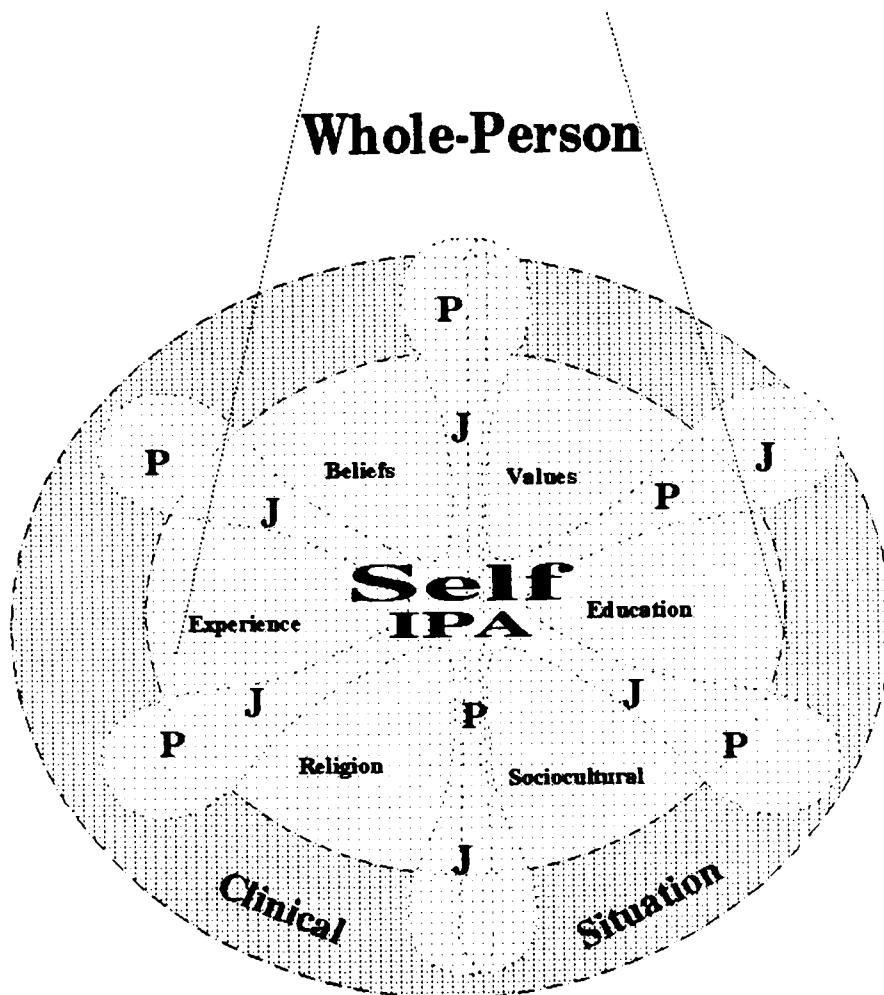


Figure 8. Brooks' Theory of Intrapersonal Perceptual Awareness. This shows how perception and judgment are wholistically viewed and could be brought into the personal system through self.

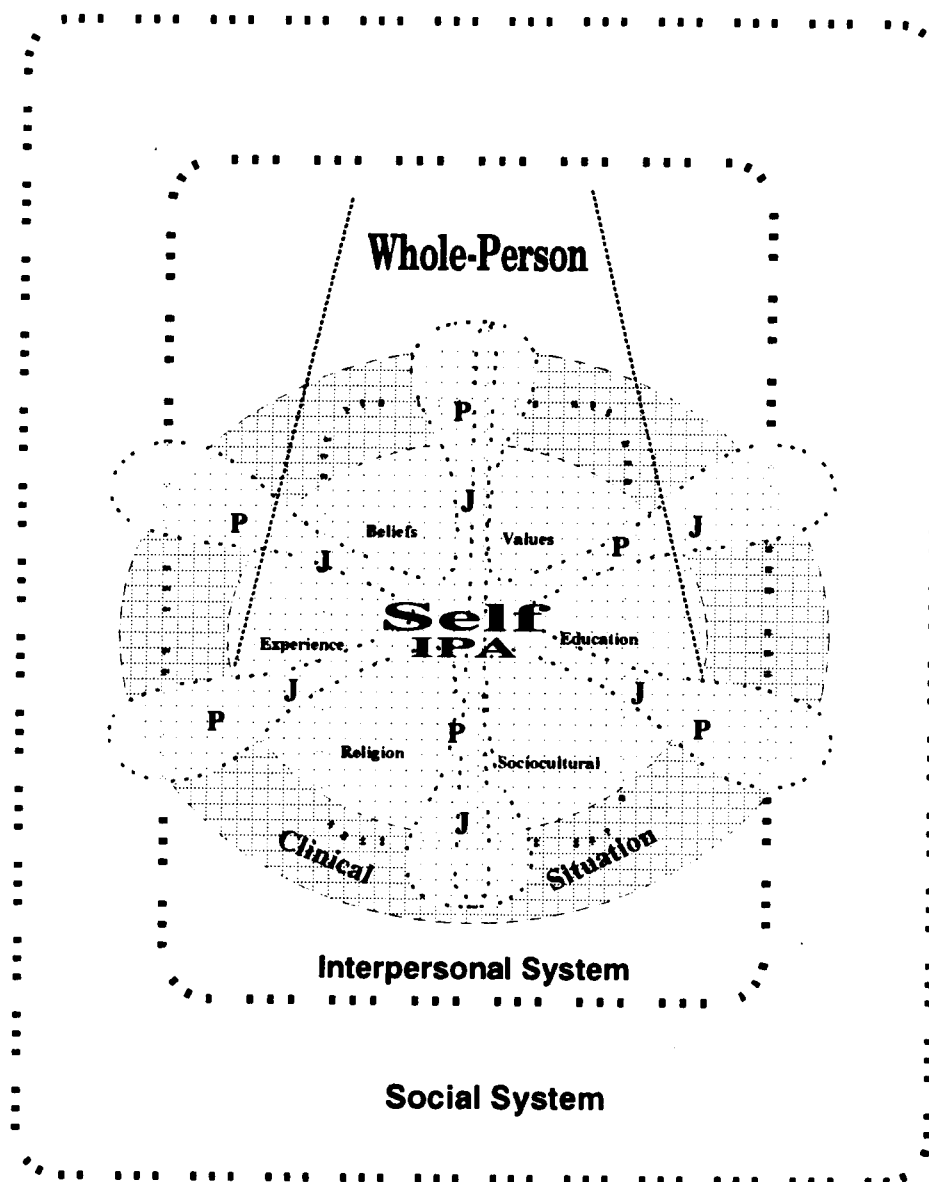


Figure 9. This illustrates a proposed whole-person reconceptualization of the personal system in which **Self is the Personal System** and demonstrates how perception and judgment cannot be viewed separately.

This researcher also proposed to bring King's concept of decision-making into the personal system. The results of this study support the concept of decision-making within the personal system. However, based on the results of this study decision-making as described by King (1981) in the interpersonal system (which was the definition from which decision-making was derived in BTIPA), would not be appropriate to bring into the personal system. Based on the findings of this study, this researcher concludes that intrapersonal decision-making is different from the decision-making that is defined by King in the interpersonal system. The results of this study suggest that intrapersonal decisions are those conclusions or interpretations which occur in the interaction of the intrapersonal perceptual awareness processes. These decisions are the intrapersonal interpretations or meanings that are given to the information (objects, events, situations attended to) that is intrapersonally communicated. The intrapersonal interpretations or *meanings* differ, from person to person, because persons have intrapersonal characteristics which are unique only to them as

individual persons. The following examples illustrate some differences in intrapersonal interpretations that occurred in this study as subjects responded to the question, what are you thinking and feeling about this situation right now?

... this is a typical EMT situation...

... it is an ethical situation....

... he is a different race, a different culture [and he] may respond differently...

... he seems anxious because of his friend's [death]...

... I am more worried about his psychosocial status right now than his medical status...

... what we have is a man who is in physical pain from injuries he received...

... I would like to know what the alcohol and drug screen was. I tend to think alcohol and drugs caused the accident...

No two subjects intrapersonally interpreted the situation in the same manner. In other words, intrapersonal interpretations are the meanings that people draw from the information that is intrapersonally communicated in situations. Therefore, decision-making, as defined in King (1971; 1981), would not be the same intrapersonally because King's focus is on the interpersonal (observable) aspects of clinical situations (e.g., actions). What has been missing in education is a focus on the nurse as the person making the decisions. Within King's framework the intrapersonal is implicit but not explicated, and this study has done that.

Previous Literature and BTIPA

In Chapter 2, it was pointed out that the majority of studies in clinical decision-making have focused on interpersonal processes and failed to include the intrapersonal processes. Implications from these studies included the need to: (a) focus on the way in which nurses make decisions (e.g., Itano, 1989; Luker and Kenrick, 1992), (b) focus on *personal variables* (e.g., Corcoran, 1986a, 1986b; Grant and Kinney, 1990; Hughes and Young, 1990; Hughes and Young, 1992; White,

Nativio, Kobert, & Engberg, 1992), and (c) focus on identifying and including all *processes of judgment* (Sanford, Genrich, & Nowotny, 1992; Thiele, Holloway, Murphy, Pendarvis, & Stucky, 1991). What all these studies had in common was the focus on particularism with implications for a wholistic approach. This current study has developed a wholistic approach. The results of this study support a whole-person approach in which all intrapersonal processes of perception and judgment, as well as a number of intrapersonal variables can be examined as a whole within the intrapersonal decision process.

Numerous qualitative studies have been done on intuition (e.g., Benner, 1984; Benner, Tanner, Chesla, 1992; Gerrity, 1987; Miller and Rew, 1989; Minick, 1992; Pesce, Marshall, Minick, & Jones, 1995; Rew, 1990) and were discussed in detail in Chapter 2. These studies have focused on various groups of practicing nurses (e.g., critical care, medical-surgical) who experience intuition and have identified characteristics that are unique to the particular groups. What the intuition studies provided was a proliferation of information about intuition

characteristics from an intrapersonal perspective. Although these studies have provided an intrapersonal view they were still somewhat interpersonal and particularistic in that the focus was on the *specialty* or *level of preparation* of the nurse (e.g., critical care, beginner, advanced practitioner) rather than the individual as a whole person, and they view intuition as a *particular form* of decision-making rather than a process within the whole-person.

Within all of the intuition literature the salient theme that repeatedly emerges is experience. Experience was noted extensively in studies by Benner (1984), Benner and Tanner (1987), and Benner, Tanner, and Chesla (1992) comparing beginning practitioners and advanced practitioners. According to Benner (1984), intuition distinguishes the expert nurses from the beginners. This implies that intuition only occurs in the advanced practitioners.

The findings of the present study have provided evidence that intuition also occurs in student nurses, and experience was also identified as the salient intrapersonal characteristic which contributed to their intrapersonal perceptual awareness. Experience is an

intrapersonal characteristic of a student nurse's *self*, just as experience is an intrapersonal characteristic in the *self* of practicing nurses. As noted in Chapter 2, many of the intuition studies discussed the need for educators to include intuition within clinical decision-making, but no studies addressed how to do this. Miller (1993) pointed out that nursing theory about intuition is lacking and "even less is known if it can be taught" (p. 593). BTIPA provided a foundation from which intuition could be examined within the intrapersonal decision process. This researcher concludes that intuition is an intrapersonal process and is most useful in education when it is viewed as an intrapersonal perceptual awareness process within the whole-person. BTIPA provides a structure by which intuition could be included in the educational process in developing the nurse as a whole person.

Another body of decision-making literature, discussed in Chapter 2, was literature that related to the affective intrapersonal process (e.g., values, emotions, attitudes, and beliefs) and included studies about ethical decision-making. Implications for further work related to (a) understanding emotional

variables in decision-making (e.g., Erlen & Frost, 1991; Kleven, 1991), (b) understanding the influence of values and beliefs (e.g., Erlen and Frost, 1991; Greipp, 1992; Nash, Edwards, & Nebauer, 1993; Omery, 1989; Pederson, 1993a; Pederson, 1993b; Waltman & Corless, 1990), and (c) intrapersonal cognitive factors (e.g., MacLean, 1989). What all of these had in common was the need to include intrapersonal processes within clinical decision-making. Ethical decision-making frameworks have been developed by Greipp (1992), and more recently by Gordon, Murphy, Candee, and Hiltunen (1994). In these frameworks ethical decisions are viewed as another "type" of decision, rather than a process within the whole-person. These studies focus on the interpersonal decisions (actions) that are made in situations, or the situations themselves, rather than on intrapersonal characteristics interacting within the nurse, as the whole person, who is making the decision. What this does is maintain ethical decision-making separate from **self**; in other words, it bypasses the person making the decisions. The findings in this study do not support affective intrapersonal processes as separate from **self**. The findings from

this study demonstrated that intrapersonal beliefs, particularly the nurses' personal beliefs about pain, can also have ethical implications. This researcher concludes, from the findings of this study, that affective processes, such as emotions, feelings, and beliefs, are intrapersonal characteristics of **self** and through the interaction of the intrapersonal characteristics of **self** these emotions, feelings, and beliefs are part of the whole-person experience. Therefore, all decision-making includes ethical aspects within the intrapersonal perceptual awareness of the whole nurse within every clinical situation. The theory (BTIPA), as refined in this study, does provide a structure which can focus on the intrapersonal characteristics of the nurse as the person making the decisions. Thus, the theory can be useful in understanding ethical issues from a whole person perspective, rather than looking at a situation and pre-determining if it actually is an ethical situation (particularistic).

Implications for Nursing

Nursing Education

As the focus of health care shifts from hospitals to communities and managed care agencies, educators have a responsibility to prepare student nurses for practice in broad settings. To meet this responsibility, educators will be required to shift their focus from particulars to wholes. BTIPA, which was developed in this study, provides a structure to teach, and for students to learn, a wholistic approach to clinical decision-making. The findings from this study have implications for guiding students in developing a strong wholistic knowledge base from which to grow and develop professionally.

For educators to prepare students, educators will also have to shift from particularism to wholism. This means that educators cannot continue to cling to teaching methods which are obsolete and must be willing to view students wholistically. To do this educators must understand their own intrapersonal perceptual awareness and seek to understand student differences and the unique contribution each brings to a classroom.

This study has provided a new approach for

educators as well as for students. In learning to make wholistic decisions, educators must be willing to find replacements for old methods (e.g., nursing process) which force thinking in a pre-identified, linear, particular mold without the context of the whole. As McMurray (1989) pointed out, it is time "to consider whether [educators have] created a sacred cow [in nursing process] which has shifted nursing's perspective from wholism to an unduly mechanized approach to care" (p. 40). Since educators are espousing the philosophy of wholism, it is time to realize that wholism must be carried through curriculum to classroom and practice.

Within the Gestalt philosophy of wholism no two individuals view the same situation in the same manner, and the whole is more than the sum of the parts. The findings from this study have demonstrated this to be true. Because of the Gestalt we can not pre-identify all the particulars (nor should we even try) in situations for students to learn. Instead it is time to focus on the student, the whole person, learning to make decisions and to prepare them intrapersonally to meet the challenges of any situation. This has

implications for developing not only nurses, as individuals, but the profession of nurses as well. From this, questions such as, how do you know someone is a nurse? and from a curriculum standpoint, what do you expect a nurse to be intrapersonally? will need to be addressed.

Two examples from this study illustrate this: one subject responded to the vignette by stating that "this is a typical EMT situation." Another subject responded to the vignette by stating "I tend to go more to the psychology as far as he's hurting... I guess my psychology degree makes me do that." Hence what is a "nursing" response rather than an "EMT" response? or what is a "nursing" response rather than a "psychologist's" response? This is an implication that has relevance for any individual who is beginning in the nursing profession. If a student is changing professions, what professional values and norms make him or her a nurse? How will he or she be socialized or resocialized (internalize professional values and norms) into the profession of nursing? Saarmann, Freitas, Rapps, and Riegel (1992) stated that "internalizing values, traditions, and obligations of

the profession is perhaps the most difficult outcome to achieve" (p. 26). This is not surprising when education focuses on competencies and overlooks the intrapersonal development of the student nurse.

For professional socialization to occur, educators must *know* what a nurse *is* (intrapersonally). Curricula expectations must exceed what nurses can do; that is, curricula must also include what a professional nurse is *intrapersonally*. This must pervade curricula - from philosophy to classroom and clinical experience. The only way this can be understood is through wholistic understanding which occurs *intrapersonally*. BTIPA has provided a structure to focus on the whole-nurse and to facilitate intrapersonal development. In the classroom this will mean teaching wholes instead of particulars, focusing on why as well as what, and considering individual differences in developing students' intrapersonal characteristics.

A serendipitous finding from this study that has implications for education was that the novice student nurses, with little experience to draw from, were highly self-focused and concerned about themselves and what may happen to them in the situation. BTIPA

provides a structure for understanding the **self** through intrapersonal perceptual awareness; educators can use this structure to help students to first recognize **self**, and then to guide students to gradually shift focus from **self** to clients. However, for this to occur, the curriculum must allow for "interpretation, dialogue, and negotiation as much as... observation, analysis and logic" (Doll, 1993, p. 10). To do this, in beginning clinical courses, educators can focus on the student side of nurse-client interactions.

An example from this study is used to illustrate how an educator might work with a student to shift focus from self to client. One subject responded to the simulated clinical situation vignette by stating that "he [the patient] is a different race, a different culture, and may respond differently." A dialogue method would allow and encourage the student freedom to express this thought. McClam and Woodside (1994) emphasize "the need to know the influence of [a person's] own culture" (p. 9) in helping persons of another culture. To elicit the student's self awareness in this situation, the educator might respond with questions such as, what do you know about this

culture? how is it different from your own? are your interpretations based on fact? In this dialogue, the student can learn to identify and differentiate his or her own intrapersonal knowledge that is forming his or her intrapersonal meaning in the situation.

An additional finding from this study that has implications for education concerns personal knowledge. An intrapersonal characteristic that was identified was personal knowledge; this included recognition of facts and "knowing" that was not categorized in any of the theoretically pre-established intrapersonal factors. Only six subjects gave specific reference to source of knowledge and these sources were related to prior education, classroom lecture, and radio broadcast. In developing the intrapersonal perceptual awareness, educators will guide the development of the students' awareness of self knowledge. By shifting the focus from interpersonal to intrapersonal, students will be able to identify and *know* their source of knowledge.

According to Chinn and Kramer (1991), drawing from Carper's (1978) ways of knowing, personal knowledge concerns learning to be aware of *self*. This awareness of one's *self* is essential before one can understand

others. Self is the core of intrapersonal perceptual awareness, and BTIPA can be an approach used to strengthen the whole-person foundation of personal knowledge. A wholistic approach will require curriculum changes and, in the words of Christine Tanner:

We can no longer tinker with the old curriculum, adding more content about critical thinking, communication, and psychosocial concerns. We can't just continue to add discrete competencies for our students to learn...

(Tanner, 1995, p. 52)

Nursing Practice

Implications for nursing practice are similar to those of nursing education. If the nursing profession espouses wholism then the approaches to clinical situations must also reflect this philosophy. The shift from hospital settings to community based settings requires the knowledge base of professional nurses to be broad and wholistic. Nurses are essential for planning, developing and delivering health care services. For nurses to be breaking new ground in preparing for the next century, existing practice needs

to move beyond the particulars and "things (i.e., tasks) nurses can do". For this to occur there is a need to strengthen the intrapersonal knowledge base of nurses in practice. Like educators, practicing nurses will have to be willing to let go of obsolete methods, begin to look beyond the tasks, and learn new approaches to wholistically understand, care for, and work with their clients. This is an opportunity for educators to link with practicing nurses to identify their own intrapersonal perceptual awareness through understanding themselves in order to work effectively with each other (intradisciplinary), with other health care providers (interdisciplinary), and with their clients (the reason for the nursing profession). The theory that was developed in this study provides a nursing theoretical approach that can be used to develop the wholistic approach of professional nurses and bridge a gap between practice and education.

Nursing Research

BTIPA was first developed and descriptively tested in this study. Future research should focus on theory verification to further clarify the concepts that have been redefined in this study and further validate the

method of content analysis that was used in this study. Additional research with BTIPA should also include intervention studies.

This study had 18 senior baccalaureate nursing students. Future studies should include students and practicing nurses with different levels of experience and use content analysis for possibly identifying and differentiating areas of professional growth that would enhance educational teaching objectives in more effectively preparing students for professional nursing practice.

Traditionally nurses' decision-making has been interpersonally focused. As a result of this study, further research is needed to differentiate and clarify intrapersonal and interpersonal decision-making.

Chapter Summary

This study has developed Brooks' Theory of Intrapersonal Perceptual Awareness, a midrange theory, which is the first nursing theory developed to provide a wholistic approach to clinical decision-making. In this study the theory has been clarified through the method of structured interview with open ended questions and theoretically guided content analysis.

Chapter 5 has discussed the research findings in relation to Brooks' theory, previous studies that have been particularistically focused, and implications for nursing education, practice, and research. This study provides research findings to support a wholistic approach to teaching and learning clinical decision-making by changing the focus from interpersonal to intrapersonal.

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APPENDICES

APPENDIX A

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

10/10/94

Research Administration
Compliance
Grants & Contracts
Research Advancement
404 Andy Holt Tower
Knoxville, Tennessee 37996-0140
(615) 974-3466
FAX (615) 974-2805

CRP #: 4546B

Title: Exploring the Perception and Judgment of Senior Baccalaureate
Student Nurses in Clinical Decision Making From a Nursing
Theoretical Perspective

Brooks, Ella M.
Nursing
405 Alps Way
Knoxville, TN 37919

Thomas, Dr. Sandra
Nursing
1200 Volunteer Blvd.
Campus

Your project listed above was reviewed. It qualified for expedited review and has been approved.

This approval is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.
2. To retain signed consent forms from subjects for at least three years following completion of the project.
3. To submit a Form D to renew approval, to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor.

Sincerely,

Lee L. Riedinger, D.L.
Lee L. Riedinger
Associate Vice Chancellor for Research

cc: Dr. Joan Uhl
1200 Volunteer Blvd.

NOTE: My compliments to you for a very well written protocol.

Brenda Lawson



**Exploring the Perception and Judgment of Senior Baccalaureate
Student Nurses in Clinical Situations**

Informed Consent

You are invited to participate in a research project. The purpose of this study is to validate a newly developed nursing theory about clinical decision making by exploring how perception and judgement is used in a simulated clinical situation.

If you agree to participate all that is required is that you complete a short demographic form, read a written clinical situation vignette, and verbally answer a few open-ended questions in a tape-recorded interview. If you agree to participate it will take approximately one hour of your time. However there is no time limit on this. Prior to answering the interview questions, you will have time to read the vignette and the interview questions, and if you prefer you can make some written notes to assist you in the interview. The written notes are for your convenience only and will not be part of the data collected. You will be asked to tear up the notes at the close of the interview. When you are ready to verbally respond to the interview questions, the tape recorder will be turned on.

Your participation is strictly voluntary. You are free to refuse to participate and to withdraw without any threat or penalty to yourself or your educational status. If you should agree to participate and then change your mind during the audiotaping interview, you may turn off the recorder, and the tape will be immediately destroyed by removing the tape from the microcassette and cutting the tape. If you should change your mind, or have any questions at a later time, all that you have to do is call the project director or co-director whose phone numbers appear below.

Your participation is strictly confidential. Your name will not be attached to any data. If you agree to participate you will be assigned an identification number which will be placed on the demographic sheet, the audiotape, and later on the transcript. Only the project director (Ms. Brooks) will be able to identify your voice. Only the project director and co-director will have access to the raw data. For any publications or presentations that arise from this research, all data will be summarized without any reference to your identity.

The project director will transcribe the audiotapes for analysis. Once the audiotapes are transcribed with the identification number only, the typewritten response is then anonymous. The audiotapes and consent forms will be stored in a locked file at the University of Tennessee, Knoxville, College of Nursing Research Center until the research project is completed. At completion of the project the audiotapes will be destroyed by the project director by removing and cutting tape from the cassette. However, the signed consent forms will be kept in the locked cabinet for a period of three years from completion of the project and after three years they will be shredded. The typewritten transcripts,

with identification numbers only, will be kept by the project director for potential secondary data analysis.

No negative effects are expected to result in your participation. It is important to emphasize that in this interview, every response is positive and important, and there are no right or wrong answers. Your responses will not be graded in any manner and your instructors will not be informed of your participation. This is about **YOUR** decision process so it is important to the study that you be honest and **SPONTANEOUS** in your responses. A benefit to you personally could include possible self-awareness of your own thinking as you relate to a clinical situation. Additionally, your participation may contribute to enhancing future approaches to teaching clinical decision making.

If you have any questions, please do not hesitate to contact:

Ella Brooks, MSN, RN
Project Director
Doctoral Candidate
College of Nursing
University of Tennessee
Knoxville, TN 37996
615-974-4151 (ask for
nursing research center and
leave message)

Sandra Thomas, PhD, RN, Professor
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Knoxville, TN 37996
615-974-4151

This study has been explained to me and I have read the information sheet, and understand its contents. I agree to participate in the study as described. I understand that my participation is strictly voluntary. I understand that there is no risk to me and that my participation will not affect my status as a student. I understand that my participation involves completing a demographic form, reading a clinical situation vignette, and having my responses tape-recorded in an interview. I understand that my participation will be kept confidential and that my name will not be used in any way in this study. I have been assigned identification number #_____ and I understand that if I have any questions or wish to withdraw, I can do so by contacting the project director or co-director, through the addresses provided to me in the information sheet, and by giving this identification number.

Signature_____ Date _____

Project Director
Signature_____ Date _____

APPENDIX B

ID # _____

DEMOGRAPHIC DATA

Fill in the blanks or circle the appropriate number below:

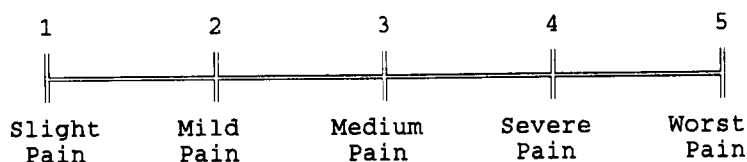
1. Age (specify) _____
2. Gender: (1) Male (2) Female
3. Ethnicity:
 (1) Caucasian (4) American Indian
 (2) Black (5) Asian
 (3) Hispanic (6) Other (specify) _____
4. Marital Status:
 (1) Single, never married
 (2) Married
 (3) Divorced
 (4) Other _____
5. Religion (specify) _____
6. Previous education before program entry:
 (1) LPN
 (2) A.D.
 (3) Diploma
 (4) Non-nursing (specify) _____
7. Years of health-related work experience (specify the number of years) _____

CLINICAL SITUATION VIGNETTE

Mr. Joe Scorilla is a 32 year old, divorced and unemployed Italian man, who was admitted to your unit four hours ago after spending the night in ICU. You learned in report that yesterday as he was driving home from a party he lost control of his car at a construction site and smashed into a tree. Joe was unconscious for a time, received injuries and a traffic citation. He doesn't remember what happened. An alcohol and drug screen was done on admission. His best friend Mike who was riding in the passenger side, was pronounced dead at the scene and Joe's family doesn't want him to be told yet. Joe thinks Mike is in ICU.

Yesterday, on arrival to the Emergency room, Joe was conscious, pale and clammy, taking short shallow breaths, and complained that "it hurt to breathe with awful pain" A chest film revealed a left pneumothorax and a chest tube was inserted. Additional injuries included multiple bruises and one large laceration on his right temple that extends over his ear. A portion of his long hair was shaved in order to cleanse and suture the wound. His other medical history included only one short hospitalization for a gunshot wound five years ago. He doesn't have any allergies. His social history revealed that he is sexually active and admitted to having multiple sex partners. He also reported that he occasionally uses marijuana but never any "heavy" stuff or IV drugs.

Joe is now sitting up in bed, alert and oriented, and his face has a frown and worried look. His neurological status is stable. Joe is guarding his left chest with his left arm and slightly trembling right hand. He has oxygen at 2 liters per nasal cannula, an intravenous line in his right arm, and a left chest tube with serosanguinous drainage that is connected to closed seal suction. The chest tube insertion site is covered with an occlusive dressing. His temperature is 98.6, pulse 92, respirations 20 and regular, and blood pressure is 122/84. His nailbeds are pink with rapid capillary refill. He had two Tylenol #3 just before he was transferred from ICU. Joe states "I need something more for pain. Geeze, I can't stand the pain, I told those people before they brought me over here that I need something more for pain. At least give me something that helps. Another thing, why doesn't anyone tell me how Mike is?" Joe rates his pain as "5" according to this pain analog scale:



Joe's medical orders include:

Regular diet

Tylenol #3 one or two tabs every 3 to 4 hours p.r.n. OR

Demerol 50 mg or 75 mg IM every three to four hours p.r.n. for pain

I.V. D₅WNS at 75cc/hr

Ampicillin IV 300mg every 6 hours

Apply neosporin ointment to lacerations and suture site q.i.d

Change dressings p.r.n.

STRUCTURED INTERVIEW

Read the clinical situation vignette and the following questions. Indicate when you are ready to answer the questions and verbally respond. Be **RELAXED**. Be **SPONTANEOUS** as you answer the questions. Your reactions and honest responses are important. Remember this is not an evaluation, there is no right or wrong answer, no value judgment is placed on what you say, the focus is on how **YOU** make decisions.

1. What are you thinking and feeling right now about this situation? Be relaxed. Say whatever comes to your mind.
2. What jumps out at you?
3. What does the client need from you?
4. What is your goal for this client?
5. Is there any other information that you would seek? For what reason would you seek it?
6. What is the first thing that you would do for this client?
7. Were there any other situations that you have encountered that you thought about here?
8. Is there anything else that you would like to add?

APPENDIX C

Scheme For Categorizing and Coding Content

<u>Responses</u>	<u>Category</u>	<u>Subcategory</u>	<u>Impacting Factors</u>
1 Verbatim transcribed	P=Perception	S=Sensory	Value
2 narrative. Line-by-	J=Judgment	I=Intuitive	Beliefs
3 line description.	D=Decision	C=cognitive	Culture
4 Words, themes, and	X=Unknown	A=Affective	Religion
5 phrases.	IPA=Intra-	X=unknown	Experience
6	personal	DA=action	Education
7	interpretation		Unknown (X)
8	or meaning		
9			

This is the scheme for data analysis. The categories are defined from *Brooks' Theory of Intrapersonal Perceptual Awareness*. The responses column represents the verbatim transcribed narrative units for analysis. Use the operational dictionary as a guide to code the content of the narrative units. Read the narrative unit and code the emergent words, themes, and phrases according to perception (P), judgment (J), decision (D), intrapersonal interpretation (IPA), or unknown (X) for an inductive emergent category. Then classify the narrative unit into the subcategory of sensory (S), intuitive (I), cognitive (C), affective (A), action (DA), or unknown (X) for new emergent subcategory. Then examine the narrative unit to identify if the response can be attributed to the impacting intrapersonal factors of perception and judgment, as described in the theory. If unable to identify, code X for unknown.

APPENDIX D

Operational Dictionary for Coding

<u>Category</u>	<u>Subcategory</u>	<u>Observational Categories or Themes</u> (Operational Definition Indicators)	<u>Emergent Exemplars</u> (Possible)
Perception (2 perceptual processes)			
	Sensory	-concrete objects, events, etc -Factual cues -identifiable/verifiable information -concrete information from vignette	-trembling right hand -IV, O2, Pulse, etc. -States pain is a five
	Intuition	-related to filling in gaps -focus on missing information -filling in information by adding own beliefs, hunches and guesses, in putting pieces together to create whole-form. -possibly think of this as anticipatory sensory cues (sensory perception). -can possible considered as filling in perceptual information.	-statement's such as "there's something more here..." -"there's more than he's telling..." -"there's a lot more going on here..." -"he's probably thinking...or going to do..."
Judgment (2 judging processes)			
	Cognitive	- analyzing facts, events, etc. - weighing the information - comparing the facts - inductive/deductive - explaining - reasoning (deliberating) - questioning	- He's got a left chest tube; he's got an IV; He's hooked up to O2; I wonder how's he gonna get to the BR and does he know to... - Since he's stable, it doesn't look like there's any medical concerns... although his pulse is 92... but that's no big deal....
	Affective	- feelings - emotions - opinion - attitude - experience - beliefs	- I believe... - This is what I'd want for me - I feel sad...; I feel sorry... - In my experience.... - I had a patient like this....

Operational Dictionary for Coding (continued)

Decision	Actions	- do nothing or ignore situation - assess further - get more data - take immediate action - consult/collaborate - give medication or hold medication	- I would do... - I would give him... - I would ask...
----------	---------	---	--

IPA	- words that show conclusions - interpretations - distinct conclusions - nonobservable decision - intrapersonal meaning/interpretation	- stable - problem is pain - nursing diagnosis - label - "non-compliant"
-----	--	--

Unknown	Unknown	Emergent unknown	identify as emergent or unknown
X	X		

To help differentiate process and decision (action):

Ask is it (narrative unit) observable? (if yes, it's action)

Ask is it (narrative unit) nonobservable? (if yes, it's an intrapersonal process)

Can the narrative unit be classified as any of the following intrapersonal factors?

- personal values
- personal beliefs
- culture
- religion
- personal experience
- education

APPENDIX E

Appendix E. Examples of Analyzing Narrative Units.

This section includes the theoretical probative value of each interview question, an exemplar narrative response to each question, and demonstrates the coding of each narrative.

Example one. Interview question one: what are you thinking and feeling about this situation? probed the whole-person experience (central premise of BTIPA). Exemplar response to question one:

- | | | |
|----|---------------------------------------|---------|
| 1 | <i>I have to question his... his</i> | |
| 2 | <i>real pain...</i> | (J) (C) |
| 3 | <i>if he's...</i> | (X) |
| 4 | <i>I don't know a lot about</i> | (J) (A) |
| 5 | <i>chest tubes,</i> | (P) (S) |
| 6 | <i>I don't know how painful</i> | |
| 7 | <i>having a chest tube is.</i> | (J) (A) |
| 8 | <i>I guess having a</i> | (J) (C) |
| 9 | <i>pneumothorax</i> | (P) (S) |
| 10 | <i>is pretty painful, I guess.</i> | (IPA) |
| 11 | <i>But... it concerns me when I</i> | |
| 12 | <i>don't see his blood pressure</i> | (J) (C) |
| 13 | <i>up but he's in horrible pain.</i> | (IPA) |
| 14 | <i>His... his...</i> | (X) |
| 15 | <i>all his vital signs seem fine.</i> | (IPA) |
| 16 | <i>And I'm thinking, does he have</i> | |

- 17 a problem other than...? (P) (I)
 18 he's been at a party... you know. He's (P) (S)
 19 obviously somebody
 20 who has a bit of a history. (IPA)
 21 And I would have to question that. That's (J) (C)
 22 kind of what pops out at me, just to
 23 question his character a little bit, to
 24 uh... see if we're really addressing his
 25 needs. (J) (C)

Each of the intrapersonal processes (perception and judgment) were identified in this exemplar. The processes occurred interactively. Line 1 and 2 revealed a cognitive questioning process. Line 3 (coded X) was not classifiable. Line 4 - 7 revealed self-admitted lack of knowing (coded as affective thinking) about chest tubes (sensory, lines 5 and 7). A cognitive questioning begins in Line 8, includes a fact cue (line 9) and concludes with an intrapersonal meaning or interpretation in line 10. A weighing of information relating to the subject's own belief about blood pressure is identified in lines 11-13 with an intrapersonal perceptual interpretation in 13. Incomplete thoughts occur in line 14 and an intrapersonal conclusion occurs in 15. Perceptual intuiting was apparent in lines 16-17, a sensory cue was identified in line 18, and an intrapersonal interpretation was made (line 20). A cognitive weighing of information and thinking of possibilities occurs in lines

21-25. The intrapersonal theme that permeated this unit was the subject's self-doubt or lack of knowing about particulars in the simulated situation.

Example 2. The second interview question, "What jumps out at you?", sought to elicit the perceptual category information, such as recognition of objects, events, situations, as described BTIPA. It was expected that the subjects would attend primarily to perceptual cues. However, whole-person factors were also identified. Exemplar response to question two:

- | | | |
|----|--|---------|
| 1 | <i>I think the death of his friend was the</i> | (P) (S) |
| 2 | <i>main thing that I took big notice to.</i> | |
| 3 | <i>Because, I mean, it's related to alcohol</i> | |
| 4 | <i>accident and that's something that I just</i> | (P) (I) |
| 5 | <i>really picked up on...</i> | |
| 6 | <i>it said he had previously been a drug user</i> | |
| 7 | <i>of marijuana.</i> | (P) (S) |
| 8 | <i>And that's probably, I would think, he</i> | |
| 9 | <i>would be asking for more medicine and stuff</i> | (P) (I) |
| 10 | <i>a lot. But I don't know.</i> | (J) (A) |

Both intuitive and sensory perceptual processes were the permeating intrapersonal factors that emerged in this narrative unit. Two sensory factual cues, the death of patient's friend (line 1) and patient's use of marijuana (line 7) were attended to. Perceptual information was added

by the subject's belief that the accident was related to alcohol (line 4), a hunch that the client would be asking for more pain medicine (line 10), and concluded with a stated lack of knowing (line 10). The intrapersonal themes in this unit related facts, personal knowing, and lack of knowing.

Example 3. Interview question three probed the intrapersonal process of interpreting information (e.g., objects, events, situations), as described in BTIPA. Responses were varied and whole-person decision processes were identified. Exemplar narrative response to: "What does the client need from you?"

- 1 I would like to uhm... develop a trusting
- 2 relationship with him so that he would
- 3 feel like what he needed from me he could
- 4 ask for from me. (D) (Action)
- 5 Do you know what I mean? (X)
- 6 I think that's what I try to do when I'm
- 7 on the floor; I try to elicit trust and
- 8 try to observe and so they feel like
- 9 whatever they need, they can ask me for
- 10 it. Maybe that's a lazy way out, I don't
- 11 know, that's just the way I want to be
- 12 treated. I want 'em to treat [me] like
- 13 if I need something, I can ask you for
- 14 it... or... and I guess I try to treat

15 people like that. And I don't know if
16 that's a good way or not, but that's... I
17 find myself doing that as I uhm... care (J) (A)
18 for patients.
19 Oh, I'd like to develop a trusting
20 relationship with him, follow orders...
21 uhm... I think what I would do at this
22 stage is probably give him some Demerol (D) (Action)
23 to see if he... how he reacts to that...
24 he has it ordered every three to four
25 hours p.r.n. for pain. It doesn't look
26 like he's had any, I might try that for
27 the pain. (J) (C)
28 His uhm... vital signs look pretty good. (IPA)
29 I think the biggest thing is try to be
30 supportive emotionally to him; follow
31 orders. (D) (Action)

The intrapersonal processes identified included decisions involving possible actions or outcome behaviors (lines 1-4, 19-22, and 29-31). Affective judgment permeated the narrative unit in lines 6-18 where the subject expressed personal values with regard to how she or he likes to be treated, usually treats patients, and wants to treat clients in the same manner. Analyzing the information and thinking about possibilities (cognitive judgment) was identified in lines 23-27. Finally, intrapersonal interpretation of information was identified in line 28. The intrapersonal

theme in this unit related to thinking and acting with regard to self preferences and values.

Example 4. According to BTIPA decisions are influenced by ones goals. Question four indirectly probed the subjects' intrapersonal conclusions and decisions (actions) by exploring subjects' goals for client. The responses were varied and both conclusions and processes were identified. Exemplar response to "What is your goal for this client?"

1 ... to have him be honest with himself. To (IPA)
 2 uh... work through the grieving process or
 3 to begin to work through the grieving
 4 process. (IPA)
 5 Obviously to heal, to mend physically, (IPA)
 6 uhm... but I really don't see that as
 7 being a big problem, you know, as long as
 8 no complications set in. Uhm, but I think
 9 again, he'll need to be uh... begin the
 10 grieving process and try to be realistic
 11 and not revert back to some possible bad
 12 habits to deal with what he's having to
 13 deal with. And if he needs uh... social
 14 worker, counselor, whatever, make sure that
 15 he gets those uhm... references. He might
 16 need legal council if he's charged with
 17 anything. (J) (C)
 18 It doesn't say what the... I don't think it
 19 said what uhm... (X)

20 they tested him for alcohol and drug (P) (S)
21 screen. It doesn't say what... how that
22 turned out, if it was positive or not, so (P) (I)
23 it would be interesting to find out how
24 that... you know... what was going on
25 there. (J) (C)

The intrapersonal processes identified in this response were intrapersonal conclusions (lines 1-5), a cognitive judgment reasoning or weighing of information (lines 6-17, 23-26), sensory, fact information (line 20), an intuitive focus on missing information (lines 22-22), as well as undefinable thoughts (lines 19-20). The theme in this unit pertained to the subject's personal desire or value for the patient to be honest with himself and personal knowledge regarding possible needs for client.

Example 5. Interview question five probed the intuitive aspect of the whole-form experience. According to BTIPA, individuals fill in gaps based on experience and knowledge and it would stand to reason that missing information is sought to understand the "whole." Exemplar response to interview question: "Is there any other information that you would seek [and] for what reason would you seek it?"

1 I think I would pursue that [refer to
 2 previous narrative unit of SA], I would try
 3 to develop a relationship with his family. (D) (Action)
 4 Uhm and try to maybe facilitate some family
 5 counseling (D) (Action)
 6 and you know... ah... (X)
 7 he has a history of a gunshot wound (P) (S)
 8 and that's usually... isn't very good sign
 9 of lifestyle - someone's coming in with a
 10 gunshot wound, kinda says something about
 11 them. (J) (A)
 12 He's a drug user, he's obviously sexually (P) (S)
 13 active,
 14 it looks like he might be leading a life
 15 that's causing him problems, you know. (P) (I)
 16 And his behavior has caused someone's
 17 death, possibly. (IPA)
 18 So I think I would pursue those avenues and
 19 see what I could help him in that area. (D) (Action)

The intrapersonal processes identified in this unit were decisions (line 1-5, 18-19), sensory process (lines 7 and 12), perceptual intuition (line 13-14), affective judgment (lines 8-10), and an intrapersonal interpretation (lines 16-17). The theme in this was related to finding information about the subject's beliefs regarding the patient's lifestyle.

Example 6. According to BTIPA perception and judgment are nonobservable, and are identified indirectly in the

actions or behaviors nurses make. The probative value of this interview question was to elicit intended nursing actions (decisions). Responses were varied and both decisions and intrapersonal processes were identified. Exemplar response to interview question six, "What is the first thing that you would do for this client?"

- 1 I would probably give him Demerol (D) (Action)
- 2 to let him know that I'm on his side. You
- 3 know, to let him know that I'm gonna
- 4 support you [patient] (J) (C)
- 5 and then try to develop a relationship (D) (Action)
- 6 to where he knows that I'm gonna help him
- 7 and work from there. You know, I don't
- 8 wanna come across like a real bitch. (J) (A)
- 9 You know, I don't think... (X)
- 10 in the position he's in, he's gonna need
- 11 support; (IPA)
- 12 and, you know, sometimes you have to give
- 13 someone a little bit of something too. You
- 14 let them know you are on [their] side, as
- 15 opposed to fighting them. (J) (A)
- 16 So I think that's probably what I would do
- 17 first off. (D) (Action)
- 18 **EB: any other things that you would do?**
- 19 I'd follow up and ask him what his response
- 20 was; I'd check his vitals again to see if
- 21 they were lower. (D) (Action)
- 22 I mean his vitals look good. (IPA)

- 23 I don't... I think he's... (X)
- 24 I think he just knows he's in the hospital
- 25 and he can get pain med. (P) (I)
- 26 You know, I think a lot of people do that.
- 27 They're in the hospital and they figure
- 28 they'll just get through it on pain
- 29 medication, especially if he's already a
- 30 drug user. (J) (A)
- 31 So... I think I would just... I would do
- 32 the general assessment, follow orders, but
- 33 I think I would just follow up on that.
- 34 Try to get inside his head, you know?
- 35 Yeah, that's... I think what I would do if
- 36 I had the time. (D) (Action)
- 37 I mean, if this is just one of many
- 38 patients that, you know, I guess it really
- 39 can depend on how much time you have and
- 40 how long they're gonna be in the hospital
- 41 with you, and how much you think you can
- 42 get done in the time you are given. I
- 43 guess I'm thinking I'm not gonna have this
- 44 guy for a couple of days. But you, you (J) (C)
- 45 know, with chest tubes, (P) (S)
- 46 he's gonna be there for a couple of days. (IPA)
- 47 So you can hopefully get a lot done. (D) (Action)

The intrapersonal factors identified in this began with a decision (line 1), followed by a cognitive explanation of why she would give pain med (lines 2-4), another decision (line 5) and affective reasoning pertaining to how the

subject does not want the patient to perceive her (lines 6-8). An intrapersonal interpretation was identified (lines 10-11) an affective reasoning regarding this interpretation followed (lines 12-15), and concluded with an reaffirmation of the decision about giving the pain med first (lines 16-17). Lines 20 and 21 pertained to intended actions, a intrapersonal conclusion (line 22), and intuitive thinking where the subject added own suspicions or hunch (line 24-25) and followed with an affective reasoning regarding the suspicions (lines 26-30). The thinking regarding actions and conclusions were reiterated by the subject in lines 32-47. The theme in this was related to the subject's beliefs about the patient's "real" pain and wanting patient to trust the nurse which was deemed important in the subject's thoughts and feelings in previous narratives.

Example 7. According to BTIPA, past experience contributes to the decision process. The probative value of this question was to elicit experiential information to verify this. Exemplar response to "Were there any other situations that you have encountered that you thought about here?"

- 1 *I've seen patients in the worst situations*
- 2 *before. I had one patient that was in for*
- 3 *a drug overdose, and you know he had little*

4 kids and everything and he was just really
 5 bad off; and, it made me think of that when
 6 I was reading about this. (J) (A)
 7 I don't know what connection it had but...
 8 it's the one I thought of. (J) (C)

The intrapersonal factors in this related to the subject's personal experience (affective process, lines 1-6) and personal thinking about the connection between past and present (lines 7-8).

Example 8. This question allowed the subjects to add anything that they wanted to add. The responses were varied and in some cases it served as a summary and verification of initial thinking and feeling. Exemplar response to question: "Is there anything else that you would like to add?"

1 It's just a really sad situation. I mean, (IPA)
 2 I think as a nurse it would be hard to deal
 3 with because you've got the patient saying
 4 he wants to know about his friend and the
 5 family saying no you can't tell him. And (J) (C)
 6 it would be kind of a hard situation to be
 7 put into. (IPA)
 8 **EB: can you describe what you mean by hard**
 9 **situation?**
 10 Just being like in the room with the
 11 patient, and him asking, you know, "what

- 12 *happened to my friend? What kind of*
13 *response would you give him?"* (J) (C)
14 *I think that would be a hard question to*
15 *answer without telling him anything. And* (IPA)
16 *that's really what would be hard about it -*
17 *is not being able to tell him honestly what*
18 *he wants to know.* (J) (C)

The intrapersonal processes in this narrative repeated the initial thoughts and feelings expressed by this subject regarding feeling upset about the patient's situation. The theme in this narrative unit verified the subject's initial thoughts and feelings regarding the simulated situation.

APPENDIX F

Appendix F. Summary of Responses

Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other situations	Else to Add
A	He's a different race, different culture, may respond differently. He's lost his friend and no one's told him. He probably knows something is wrong.	Pain History of his culture and the fact that he hasn't been told about his friend. I would feel uncomfortable dealing with him.	Reassurance Needs to trust me Needs to know that I'm on his side.	Deal with the physical things. Make sure he's stable. Deal with friend's death. Deal with pain.	Call doctor on medication. Ask doctor on patient's history if knows about marijuana use. Talk to doctor about pain med. I would feel more comfortable talking to the doctor.	Talk to patient first to see if I could get him feeling more confident [reassure and trust.] Assess further Check vital signs.	Had patient with drug abuse problem and talked to doctor about what to do for patient's recurrent pain.	Deep down he knows something is going on and needs to be told about friend's death.
B	The pain and I don't know how to relieve it. He's been lied to about Mike and I don't know how to tell him about Mike. I don't know how I would tell him.	Pain is the big thing. Vital signs stable but I would continue to assess.	Pain relief. A lot of emotional support (because) best friend died, he's divorced and unemployed so has lots of stress in his life. Has lots of stress in his life.	Pain relief. Prevent complications. Make sure chest tube and everything is all right. Prompt recovery.	Assess further about pain - if it is sharp, or stabbing [or] see if there's any other associated factors.	Provide Pain Relief. Assess further on Emotional Status. Would Avoid topic of Mike or maybe see if I could go ahead and tell him the truth.	Potential AIDS patient. Haven't had any close friends die so don't know how I would approach the situation.	Just looks like biggest problem is pain.
C	It is an ethical situation because we do seem to apply our standards of living a lot of times on the patients we take care of. His lifestyle is not always the same as a lot of nurses. Patient's rights against family rights and it seems to always be the nurse that's caught in the middle.	His lifestyle. Alcohol and Drug screen test and no results. He admitted using drugs... a lot of times might read into the situation that he was drinking at the time. So therefore you kind of have a little bit of animosity towards him. Pain.	Would need to administer the pain medication because this is the immediate problem.	Pain relief. Counseling [for lifestyle]. Social help for possibly trying to get a job. Spiritual help.	Lifestyle. Spirituality.	Physical problems first - pain relief. Social help. Spiritual help.	Have cared for alcoholic patients before.	Lifestyle. Team focus with social worker, spiritual counseling, possible AA referral.

Appendix F. Summary of Responses (continued)

Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Please to Add
D	Pain medication and trying to decide what to give.	Ethical dilemma (to tell or not to tell). Would prefer to get to know him personally. Has rough history. From history, I think he'd be kind of a rough guy. I kind of wonder what kind of trouble I'm gonna get myself in by telling him (about friend). Don't know what to do.	Needs medical support for pain. Needs psychological support. Needs social support. Needs an advocate.	Pain relief. Medical needs make sure wounds heal. Make sure not suicidal.	Get alcohol and drug screen results. Assess further: more information about other medical history, substance abuse. It seems like he would be involved in a little more than a gunshot wound.	Check the orders, do a short, give assessment, give something for pain... try to make him more comfortable.	Worked with indigent patients that were similar to what's described here (in vignette). I'd want to get to know the situation because [of] my own judgments about pain medication for indigent people who tend to abuse the system... that bothers me... I wouldn't withhold the medication, if it were necessary, if he needed it.	No. I think this is a typical situation.
E	He seems anxious because of his friend's status (and) that needs to be addressed. He's listing his pain as the worst pain (and) we need to help that some way. Vital signs are very much within normal limits so I'm really going by his demeanor as far as I think anxious I think he is.	Anxiety level. Needs to be told about Mike. Have a dilemma to respect the family's wishes or to need the patient's needs.	Pain relief. Anxiety relief. Needs information: about friend, about his own situation, and what he can expect as far as his recovery time etc. Reassure him about himself.	Relieve pain. Decrease anxiety.	More about the family support system, the friend's family and closeness of friend. His prognosis - how long will be in hospital.	Pain relief along with some relaxation techniques. Make sure comfortable. Find out what he needs from family. Check if IV correct. Check IV site. Check chest tube drainage. Check LOC.	None	None

Appendix F. Summary of Responses (continued)

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Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Else to Add
F	Kind of upset because keeping friend's death from him. Since he's asking about friend, he needs to be told. Sad because he doesn't know about friend.	Death of friend because it's related to alcohol accident. Previous drug user (so) would probably be asking for more medicine.	Psychological support for his death and friends out about friend. Physical support for wound care and pneumothorax.	Get physically well. Pneumothorax heals. Prevent infection. Pain control.	More data about family support. More data about pain and symptoms of pain other than he's stating he's having pain.	Get him to relax. Get him to concentrate on other things. Provide pain relief. Assess his pneumothorax if it's (chest tube) draining properly. Listen to his lung sounds. Check his wound (and) his lacerations.	Had previous patient with drug dependence and depression. What the connection is (but) it's the one I thought of.	It's just a really sad situation. It would be hard situation because would not be able to tell him honestly what he wants to know.
G	He might have slight concussion. Past history of drug abuse. Pneumothorax Pain (but) vital signs don't seem consistent with someone who's in pain, and has adequate tissue perfusion and everything else.	Pneumothorax. The fact that his friend was killed in the accident. Possible situation with patient's family. Guarding behavior is consistent with pain.	Pain relief. Possible reassurance for anxiety. Pain relief is the main thing (and) would probably go ahead and give him the Demerol.	Pain relief. Pneumothorax resolved. Tell him about his friend. Get more in depth assessment about alcohol and drug use.	Need more information about alcohol and drug use (because) gunshot wound five years ago (because) those sorts of things seem to happen with that population more than they do with the general population. Would also like to know why family doesn't want him told yet about friend.	Pain relief. Answer his questions. Ongoing assessment check neuro status. On second thought, would withhold pain med until have chance to observe him.	No	Thinks should observe patient. Would be hard to detect any worsening head injury (if gets pain med) .. does need pain relief too (because of) pneumothorax...
H	Wonder if accident was from a drug and alcohol because was coming from a party. The fact that his friend died and he doesn't know and that's somewhat unfair.	Anxiety. Pain.	Pain relief, both pharmacologic and non- pharmacologic. Anxiety relief.	Pain relief. Pneumothorax resolved. Check chest tube. Check dressing. Monitor neuro status.	What he does himself to relieve anxiety that would be appropriate within the hospital institution.	Relieve his pain. Thinks it's only fair that patient be told about friend (but does not say if would inform him).	Wonders if accident was alcohol or drugs. Mom had friend who got hit by a drunk driver and husband was killed but friend lived after in coma for awhile.	Saw where he had his long hair shaved and we're to cleanse the suture and wound. And that's probably going to be the physical aspect of his care. "I know, myself, if my hair was shaved I would miss it and it's that part of your loss of control..."

Appendix F. Summary of Responses (continued)

Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other situations	Else to Add
1	I'm feeling Joe is slightly neglected by the nursing staff. If he says he needs more pain medicine, then he probably needs more pain medicine. I think his spiritual innerself is being neglected because he deserves to know what happened to his friend. He's out of ICU. He's stable. I feel he's very anxious now.	He's anxious. He had a gunshot wound in the past which kind of tells me a little bit about his lifestyle. May live a risky lifestyle. Pain. Friend's death.	He needs attention. He needs venting to someone to talk to. Pain control. He needs reality. He needs physical care.	Pain management. Education on safety outside the hospital. Possible AA. Spiritual self searching. Stop smoking as a whole.	More history about gunshot wound and personality. Spiritual support.	Pain management. Anxiety. Wound care. Assess vital signs. Deal with his emotions.	Thought about being in the hospital as a patient and being in pain and feeling "empty" when put off to wait for pain med.	Would like to know the outcome but know that's impossible at this point. Not sure why he's on a regular diet. Thinks should be on prudent diet so would not have gas pains or anything that would be very painful for his chest. Nothing that would give him digestive problems. Would get some clarification on drug use and find out how patient defined heavy stuff.

Appendix F. Summary of Responses (continued)

Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Else to Add
J	I feel sad. I'm feel sorry. I'm wondering about the drug use. It my concern right now. I'm thinking there's a lot of things could be influenced by, like he's Italian, he's divorced. There's a lot of things I could be prejudiced by but know better now. He's unemployed; he's a young guy; he's out drinking. My beliefs [could] interfere with what he's doing, but I know that I could be in the same position that this person is in. I know where I'm coming from, but I've got to look through his eyes, when I'm examining him.	His trembling hands. His increased pulse. He's in pain. I would address that pain.	Needs somebody to listen to him because he hasn't telling the whole truth (because) I see he's got a trembling hand; his pulse is increased above what it should be; he said he's used marijuana but nothing heavy or anything like that; and, for some reason, I've got a tendency not to believe that. He needs pain medicine. I would give him something for pain.	To obtain more data from him for assessment and establish a goal, because don't really have a goal until able to talk to him and get more out of him myself.	Find out what his needs are because he's seeking for something. He's been divorced. He's had a lot of losses in his life already. He's unemployed, he uses marijuana, and he goes drinking. So there's something missing in his life and I'd have to find out what it is.	Introduce self and talk to him. If possible, continue [to talk to him]. If he wasn't, would go ahead and give him the Demerol 50 mg. and then return to him within 20 to 30 minutes and talk to him at that point.	Related to personal things, like my husband used marijuana, and he was unemployed at one time, and you know how people respond to you. They look down at you and stuff like that so I'm gonna go out of my way because I'm not gonna look at him and judge him.	Just that there's not enough time to spend with this person and you're feeling like a drug pusher.

Sub ject	Thinking and feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Place to Add
K	What comes out most of all is anxiety, under stress for multiple reasons: his own injury [and] where [friend] is. He's in pain [and] can't get relief. Although, his vital signs appear stable, he just appears to be under stress. He reports occasional use of marijuana and never any heavy drug use; but we don't know that for sure; he could be underestimating, he could be accurately estimating, [but] don't know if he's underestimating, and if he's used extra drugs in the past and his pain may be more severe than what we anticipate, and he may need extra medication.	The patient is anxious, under stress for multiple reasons: his own injury [and] where [friend] is. He's in pain [and] can't get relief. Although, his vital signs appear stable, he just appears to be under stress.	The first he needs is reassurance - just have a general assessment and kind of reassure him that you are checking on him. He needs to have the pain issue addressed. He needs questions answered about friend you could just say "that you don't know but that you will check on that - and are if you could find out any information for him about friend."	Monitor vital signs and neurological signs because he did have a laceration to the head and the chest injury. Comfort and relief is another goal. Decrease in stress and anxiety. Promoting lung expansion and promoting gas exchange.	What the alcohol showed on arrival. It might indicate his dependence or actual use of other drugs that he didn't admit to. How important the friend was to the patient.	The first thing would be to assess him and assure him. As I would be assessing him and talking to him, I would just mention that I don't know what the condition of this friend is; I would let him just know at that time, even though I probably would know, and just address that issue that I would try to find out.	Had similar situations in the past and one of the big problems is trying to coordinate when you are going to tell the patient that their best friend, or their family member, has passed away. Thought about situations where patients have used more drugs than admitted to. A lot of times I get the feeling people underestimate their actual consumption - not always true but....	No
L	I think the biggest thing is that I'm offended that I'm being asked to lie to [the patient]. I think also that if [the patient] doesn't change some things that he's doing that he's going to wind up dead like his friend. He's in pain. Possible needs mental help as well as physical	Needs pain medication. Needs more help - mental help as well as physical help.	Definitely needs pain control. Needs someone to trust that he can talk to about situation. He needs direct questions and a place to give honest answers about situation. He possibly has a drug and alcohol problem.	Be able to deal appropriately with [friend's] death and possibly his own substance abuse problem. No infection Be healthy and get out of hospital. No neurological decline.	Assess more for any physical change - like leak in chest tube or any pneumothorax change. Address whether or not he had an alcohol problem. That needs to be addressed and cleared up if he wants to continue to live and maybe not kill other people.	Pain control. Assess if something was causing increased pain or if it was from all the procedures and from his injury.	Thought about a patient who had wrecked while drinking, had gone to jail and was in ICU. Also had a patient with a chest tube who had severe pain and was holding himself just like [the patient] in this situation.	Find out more about the accident - why it happened and if he had been drinking. Get more information about lifestyle and see where I can help. Hopefully get a psych consult.

Appendix F. Summary of Responses (continued)

Sub ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Else to Add
M	This is a typical EMT type situation. He has more problems than meets the eye. Needs to be told about friend's death to relieve anxiety since he is in stable condition and the person to explain that to him is in question. A lot of times not knowing is worse than knowing. The bad news for me is not knowing at all is worse.	Maybe he's addicted to narcotics because these drugs aren't relieving his pain. He said he doesn't do any heavy stuff but I really don't believe him. I worked in an agency where we handled drug overdoses and a lot of times these people had a hard time admitting that they took drugs or that sort of thing. Also had a personal experience with an alcoholic.	Needs psych evaluation and some counseling needs to be recommended to him. I need to be honest with the physician about my perceived insight into him. He needs emotional support from me and maybe he needs me to intervene with his family somewhat about explaining friend's death. Needs reassurance and firmness because don't want to feed drug habit. Needs medication. He's agitated. May be worried about HIV. Physical needs.	Promote wellness, provide comfort, reassurance, pain control, monitor for infection especially since he's on an antibiotic IV, which is a pretty strong dose. Monitor for head injury and monitor LOC.	More information about gunshot wound five years ago and if HIV positive. Would ask the physician to run a test for HIV. Check out his psych history that he's not telling about.	Always, breathing, circulation. If he answers appropriately and he's oriented to person, place and time, then I would monitor for infection, IV site and go through all the physical things before psychological.	Experiences related to working as EMT	Would like to know what his pre-hospital care was from paramedics. Would be interested in the alcohol and blood screen levels. Concerned about the HIV possibility and if he really is in the drug culture.
N	I'm more worried about his psychosocial status right now than his medical status. Because of his history, I question whether he's really not necessarily an addict, but some sort of increased tolerance to pain medicine.	Alcohol and drug screen. His friend was killed. Although it says that he's neurologically stable, he does have a head injury and I need to worry about that. Pneumothorax.	Going to need a lot of support because I suspect he's going to feel guilty when he finds out what happened. He needs me to make sure I'm checking like any change in neuro status, any change in drainage. Needs psychological support more.	Decreased pain. That he would be comfortable talking about what happened. No change in neuro status or respiratory status.	The results of the alcohol and drug screen test because they might impact on his care or him, both like in terms of medications he may need and increased drainage if he's got some tolerance to meds.	Check vital signs, all tubes, listen to breath sounds, make sure dressing is intact, him a few minutes and find out how he's really doing besides just his statement "I want something for pain."	Worked on neuro floor and specifically thought about two brothers who were on the floor and their family didn't want either one to know how they were doing. They'd been in an auto accident after a wedding rehearsal party.	No.

Appendix F. Summary of Responses (continued)

Subject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Else to Add
O	That we have a man who is in physical pain from injuries that he received and seems to be in the same mental pain from not knowing about his friend. May be suffering a little guilt from what's happened. Needs help with those areas of pain and needs information.	His guarding his chest area. The slight trembling that he has. The fact that he appears to be in some real pain. The fact that he states his pain is a five on the scale. It appears from this written word that he is suffering from pain and he needs something for that. He needs information about his friend.	Needs pain relief. He needs a lot of reassurance about what has happened and about what is going on.	The first one is pain relief. Needs information about what is going on. I think someone needs to give him that information. If not the nurse than maybe the family.	Find out what he has been told about his friend. Find out what he remembers transpired. Find out how he reacted to the pain medication he's received before (like) what did it do? Did it help? How long did it take? That kind of thing.	The first thing would be to go check the pain to see when he'd had the last pain medication. Get information first about previous pain medication. Wouldn't give anything until checked those things first. Continue observing.	Had patient who was in auto accident with jaws wired shut and felt the nurse didn't try to find out from him what he needed, so he was probably in more pain than should have been. Had patient who's mother died in another part of the hospital but family wouldn't tell her that she died.	Might be suffering some guilt.
P	The first thing I would like to know what the alcohol and drug screen was. I tend to think alcohol and drugs caused the accident. I also tend to wonder about the (and) medicines (and) needles really needing the pain medicine. It seems like an ordinary emergency room accident.	The driving home. The drug and alcohol test. The family not wanting to tell patient about friend's death. Here's asking for more pain medication. He seems to be stable medically so tend to focus more on what's going on psychologically than medically. Guess psychology degree makes me do that.	Needs medical attention as far as lacerations, ointments, and all that. Really think it's more support, more understanding, more education, needs a lot of education as far as his multiple sex partners, and gunshot wound five years ago.	First goal would be free of pain. Get rid of chest tube. Keep down infection. Nursing diagnoses of knowledge deficit, trying to educate about the different things that are going on with him. The marijuana use and multiple sex partners. A lot of coping. Long term, get him out of the hospital.	Alcohol and drug screen results. Find out about his social life. Focus on psychological and social things. Information about social and drug history.	First thing would be to get the pain under control. Then deal with some other problems. There's more going on with him besides this. Get more of a history. Get more labs on him. Think nurse tend to just look at medical problems and don't tend to look at psychological problems and I'm just real big on that.	Not personal. When I saw alcohol, I immediately thought he was drunk. Work on psychiatric floor so tend to see a lot of this type.	Is more of a people person than medical so tend to look at psychological more than medical.

Appendix F. Summary of Responses (continued)

Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Else to Add
Q	I have to question his real pain. Doesn't know a lot about chest tubes so does not know how painful having a chest tube is. Vital signs seem fine - not consistent with pain complaint. He's been at a party. He's obviously somebody with bit of a history. Would have to question his character a bit.	This man is going to have a lot to deal with. He has a pneumothorax but thinks as long as he's maintained that will be fine. He's going to have a lot of emotional things to deal with.	Would like to develop a trusting relationship with him so that he would feel like what he needed from me he could ask for. Tries to elicit trust when working on the hospital floor. That's the way wants to be treated and tries to treat people like that.	To have patient be honest with himself. To begin to work through the grieving process. To mend physically. Possible social and legal counseling.	Pursue alcohol and drug screen results. Try to develop relationship with his family. Try to maybe facilitate some family counseling. He's has a history of a gunshot wound and that usually isn't a very good sign of lifestyle. Kind of says something about him. He's a drug user. He's obviously somebody who's sexually active. It looks like he might be leading a life that's causing him problems. So would pursue those avenues and see if could help him in that area.	Would probably give him Demerol to let him know that I'm on his side. To let him know that will support him and then try to develop a relationship and work from there.	See people all the time who abuse the system as far as drug use.	No.

Appendix F. Summary of Responses (continued)

Sub- ject	Thinking and Feeling	What jumps out at you?	What does client need from you?	Goal for Client	Other Information	First thing would do	Other Situations	Else to Add
R	He's in pain and his pain is not being addressed properly. He says he can have Demerol and would probably give it to him, if he's in pain. He's especially after what we just heard in lecture about getting their pain under control so that they can breathe better. Wonder why hasn't been told of friend's death. Would be difficult to lie to him. Am very judgmental about drinking and driving.	Pain. What struck me was that he [sic] about my age, so I can kind of understand somebody that age. He's divorced and I'm relate to that. Initially, wanted to be judgmental about his alcohol drinking and stuff like that, and I'm not saying that I never drink and drive, it's just the fact that he had consequences to it and I've never had such consequences. That nurses and the doctor is in pain and needs something else for pain. Why hasn't he been told about friend's death?	For his needs to be met. Needs something for pain. Deal with questions about friend. Might need something alcohol withdrawal.	Reduce pain. He needs to be calm. He doesn't need to be dealing with pain. Based on my past experience I've dealt with severe pain in that I had a broken leg and it's hard to relax. So I guess my goal would be to reduce his pain and to address need about friend. Wouldn't deal with anything at this point about alcohol use. It maybe he has a slightly bad hand, I don't know if that's from being off alcohol. Two goals right now would be dealing with pain and questions about friend.	Would want to know if he's Italian straight from Italy or second or third descendant from local area. Would like information about family support system. Wonder if HIV positive.	Give him Demerol. Get more information about support. Address need he's asking for. Something might be missing might not be telling everything.	No particular situation. Has seen trauma patients but didn't really think of any one situation.	Wonders why ICU only gave him Tylenol. Is pre-judgmental and know it's important not to pre-judge. Initially thought of patient as being irresponsible and am probably paying for it because patient is unemployed. Maybe nurses are pre-judging the patient.

VITA

Ella Mae Brooks was born in Mobridge, South Dakota. She grew up in Isabel, South Dakota where she attended grade school and high school. She married a career Air Force man. The military life brought about numerous relocations which provided opportunities for diverse experience and education.

She began her nursing career as a Licensed Practical Nurse. She continued her education and received a Bachelor of Science Degree in Biology from University of Nebraska at Omaha in 1979 and a Bachelor of Science Degree in Nursing from Creighton University, Omaha, in 1981. In 1988, she received a Master of Science in Nursing from University of Central Arkansas at Conway. She has practiced clinical nursing in a variety of settings with the majority of experience in adult health. After completing her Master's Degree, she taught for three years in a baccalaureate nursing program.