EMPATHY AND EMPATHIC COMMUNICATION: NURSING STUDENT

PERCEPTIONS OF PROGRAM EFFECTIVENESS, ACADEMIC

EXPERIENCES, AND COMPETENCE

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Libba Reed McMillan

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Rebecca Elizabeth (Libba) Reed McMillan, daughter of Willard (Skeet) and Mary Reed, was born in Talladega, Alabama on August 31, 1960. She married Kenneth Neil McMillan, Lt. Col USAF (retired) on June 18, 1983. She graduated from Auburn University with a Bachelor of Science degree in Nursing in June, 1983, and completed her Master of Science in Nursing from the University of Texas in Arlington (UTA) in December, 1986. The areas of specialization included Cardiovascular Clinical Specialist, Teaching, and Adult Health. It was through working with various types of patients—those that were critically ill, emergency trauma, cardiac rehabilitation, school nursing students, families at a poverty clinic in South America and maternal-child/Special Care nursery patients—that she grew to appreciate and understand the importance of her dissertation topic on empathy. She entered Graduate School at Auburn University in January, 2005, and pursued her doctoral degree in Educational Psychology. She worked as a Graduate Teaching Assistant from August, 2006-present in the Department of Educational Foundations, Leadership, and Technology. She lives in Auburn with her wonderful family, which includes her husband, two daughters Meredith and Madeline, and four-legged family members, Maggie and Moses.

DISSERTATION ABSTRACT

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The purpose of this survey study was to examine the relationship between senior baccalaureate nursing student's perceptions of their nursing program effectiveness in teaching them to empathically communicate with patients and family members and (a) attitudes toward empathy in patient care and (b) perceived competence as a result of instruction. Nursing program components, as measured by the researcher-designed Nursing Student Empathic Communication Questionnaire, were divided into the following five areas: academic exposure to patient care situations, curricular emphasis during the nursing program, perceived program effectiveness, perceived competence, and academic sources. Student attitudes toward empathy in patient care were measured by the JSPE Nursing Student Version R . This instrument contains 20 Likert-type questions that

measure orientation or attitudes toward empathy in patient care. Another purpose of the study was to perform psychometric evaluation of the JSPE Nursing Student Version R to support the existence of empirical relationships among a set of variables determined in the literature to be associated with empathy. The examination of the underlying constructs of this measurement was important to this study because this data contributes to the construct validity of the instrument with nursing students.

The study was conducted using a survey design and data collection from September to November 2006. The population consisted of 14 baccalaureate programs with CCNE accreditation, with a sample population of 600 nursing seniors. Results of the study showed through backward regression technique that the sub-component of academic exposure was the highest predictor of student attitudes toward empathy in patient care. Academic exposure accounted for 11.6% of the variance for student attitudes toward empathy in patient care. The subcomponent of academic exposure was also the highest predictor of perceived competence as a result of nursing program instruction. Academic exposure accounted for 19.1% of the variance of perceived competence as a result of nursing program instruction. A hierarchical regression analysis was used to examine the extent to which attitudes toward empathy were related to perceived competence after controlling for the influence of the four program components. These results showed that the four program components contributed 22%, with the addition of attitudes toward empathy in patient care contributing only 1.1%. Implications to nursing education underscore the importance of increased exposure to clinical patient-care situations and highlight the role of faculty feedback and remediation from both attitudes toward empathy and perceived competence perspectives.

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I. INTRODUCTION

Baccalaureate nursing program educators are faced with intense expectations from many stakeholders, such as patients, students, academic accreditation communities, and healthcare administrators, to produce graduates that can enter their professional practice with a high degree of skills and competence. Core nursing competencies, such as critical thinking, communication, assessment, and technical skills, direct many aspects of the teaching/learning process in baccalaureate nursing education (AACN, 1998). Nursing educators are continually faced with making judicious decisions in the evolving process of revising, refining and enhancing curricular content to embody these core competencies. A central goal for nursing education programs is to identify and maximize student learning experiences of these competencies in both the clinical and theoretical setting to facilitate student achievement and thereby meet educational standards necessary for accreditation (Standards for Accreditation of Baccalaureate and Graduate Nursing Programs, 2003).

In regard to addressing the attainment of core competency of communication, the role of the nurse extends beyond mere information gathering regarding disease and treatment. There is expansion of this role into the creation of a therapeutic relationship that assesses the patient's concerns, promotes understanding, exhibits empathy and

communicates empathically through providing comfort and support (Hardee, 2003; Kruijer, 2000; Platt & Platt, 1998; Price & Archbold, 1997).

Therapeutic communication, which includes empathy, in patient care is accepted as a necessary component in the nursing profession and must thereby be an essential element to accredited nursing education programs (AACN, 1998; Standards for Accreditation for Baccalaureate and Graduate Nursing Programs, 2003). Empathic communication skills are critical to providing high-quality nursing care to patients in an attempt to holistically understand the patient's perspective. These skills pertaining to therapeutic communication must include evidence that the student: (a) demonstrate communication skills during assessment, intervention, evaluation, and teaching, (b) adapt communication methods to patients with special needs, such as psychological or sensory disabilities, (c) use therapeutic communication within the nurse-patient relationship, and (d) elicit and clarify patient preference and values (AACN, 1998, p. 10). This clarification process of patient preferences and values involves the ability of the nurse to understand the patient's perspective and communicate this understanding, which involves empathic ability.

Correspondingly, empathy has been linked with improved patient outcome measures, and is regarded to be a key determinant of patient and family satisfaction, improved clinical outcomes in the form of recovery and healing, fewer malpractice suits and litigations and overall positive perspectives of care (Chant et al., 2002; Platt & Platt, 1998). Although much has been learned about the role of empathy in patient care (Alligood & May, 2000; Baillie, 1996; Freshwater & Stickley, 2003; Gould, 1990; Irurita, 1999; Kunyk & Olson, 2001; Lauder et al., 2002; Morse et al., 1992; Smyth,

1996; Thorne et al., 2005; Yegdich, 1999), and patient outcomes (Caris-Verhallen et al., 1999; Chant et al., 2002; Forsyth, 1979; Platt & Platt, 1998; Reynolds & Scott, 2000), few studies have explored the potential relationship between student perception of effectiveness of the nursing program in teaching empathic communication as related to student attitudes toward empathy in patient care (Mozingo et al., 1995; Rogers, 1986). Even fewer studies have delved into student perception of program effectiveness and their perceived competency to empathically communicate as a result of this instruction (Farrand et al., 2006; Hale et al., 2006). Program effectiveness encapsulates the aforementioned components of academic sources, curricular emphasis, and academic exposure, which are tightly wedded to fulfilling the expectations of the stakeholders and the nursing profession.

The decision-making process of curricular reform cited by both nursing and medical school faculty, center on common themes of program evaluation variables in the teaching-learning process of healthcare students. These include curricular emphasis of when content is taught or concentrated during the program (Benbassat & Baumal, 2004; Deloney & Graham, 2003; Farrand et al., 2006; Hale et al., 2006; Hojat et al., 2004; Layton, 1979; Mangione et al., 2002; Rogers, 1986; Spiro, 1992), academic exposure to patient care situations (Beckman & Frankel, 2003; Dolan, 2003; Edwards et al., 2004; Gerrish, 2000; Hodges, 1991; Lauder et al., 2002; Makoul, 2006; Nicol et al., 1996; Mozingo et al., 1995; Steginga et al., 2005; Woolley & Jarvis, 2007), and use of pedagogical methods utilized by faculty members in the clinical and academic setting (Becker & Sands, 1988; Bowles et al., 2001; Butler et al., 2005; deLucio et al., 2000; Hardee, 2003; Hodges, 1991; Holm & Aspegren, 1999; Kruijver et al., 2001; Layton,

1979; Lonie et al., 2005; Reynolds et al., 1999; Roter et al., 2004; Shapiro et al., 2004; Wikstrom, 2001) .

The predictive ability of program factors is manifested not only by the outcome of the student's successful completion of the nursing program, but also by a student's perception of their competence to deliver patient care as a result of nursing program instruction. At stake in a program effectiveness evaluation by students is far more than academic reputation of the nursing program. The ultimate goal for effective nursing education entails ensuring positive change in the student's demonstrated ability to perform skills, perceived competence to perform skills, and enhanced positive attitudes toward patient care. In particular, the identification of didactic and clinical teaching-learning practices that support the achievement of improved student learning outcomes regarding the competency of communication, including empathic communication, is fertile ground for nursing education from an accreditation standpoint (AACN, 1998; Standards for Accreditation for Baccalaureate and Graduate Nursing Programs, 2003). One pivotal way of identifying these practices is by the solicitation of feedback from the student, a major stakeholder of nurse education. The scarcity of studies that have evaluated nursing program effectiveness in teaching therapeutic communication (empathic communication), as well as the vital role of student attitudes toward empathy in patient care and perceived competency to empathically communicate with patients and families are the driving forces of this study.

However, lack of agreement of a definition of empathy has hindered the ability to measure the construct. Researchers that have published studies on empathy have focused on varied aspects of measuring the construct (Carkuff & Truax, 1967; Davis, 1983;

Hogan, 1969; Hojat, 2007; Hojat et al., 2002a, 2002b, 2003, 2004; LaMonica, 1981).

Approaches to measurement of empathy in healthcare students necessitate an instrument

to reflect student's orientations or attitudes toward empathy in patient care (Hojat, 2007;

Hojat et al., 2002a, 2002b, 2003, 2004). Researchers at the Center for Research in

Medical Education and Health Care developed a research instrument that was designed to

specifically measure empathy among students and practitioners of the health professions.

Empathy in patient care is defined as "a predominantly cognitive (rather than an

emotional) attribute that involves an understanding (rather than a feeling) of experiences,

concerns, and perspectives of the patient, combined with a capacity to communicate this

understanding" (Hojat, 2007, p. 80). This research team cited the import of investigating

the development of empathy among health professions students and practitioners and to

examine correlates, antecedents, and outcomes of empathy at different stages of training

as well as different types of practices (Hojat, 2007). Understanding what empathy is (and

is not) leads to investigation of what value empathy contributes to patient care.

Purpose of the Study

      The purpose of this survey study was to examine the relationship between senior

baccalaureate nursing student's perceptions of their nursing program effectiveness in

teaching them to empathically communicate with patients and family members and (a)

attitudes toward empathy in patient care, and (b) perceived competence in empathically

communicating with patients and family members as a result of nursing instruction.

Nursing program components and student's perceived competence as measured by the

Nursing Student Empathic Communication Questionnaire were divided into the

following five areas: academic exposure to patient care situations, curricular emphasis during the nursing program, perceived program effectiveness, perceived competence, and academic sources. Student attitudes toward empathy in patient care were measured by the published JSPE Nursing Student Version R (Hojat, 2007).

Another purpose of the study was to perform psychometric evaluation of the JSPE Nursing Student Version R to support the existence of empirical relationships amongst a set of variables determined in the literature to be associated with empathy. The examination of the underlying constructs of this measurement was important to this study because these data contribute to inferences made from scores regarding the construct validity of the instrument developed to measure nursing student's attitudes toward empathy in patient care.

Research Questions

The following research questions were developed to examine relationships between selected variables represented in student perception of program effectiveness and student attitudes toward empathy in patient care. The first two questions regard contributions of data that contribute to researcher inferences regarding the validity of the instrument that is used in the study that measures student's attitudes toward empathy in patient care. Program effectiveness, as related to the core competency of therapeutic communication, which includes empathic communication, is addressed in Questions 3 and 4. The four research questions are:

1.	Is there a statistical difference between the JSPE Version S (developed for medical and other health professions students) and the JSPE Nursing Student Version R?

2.   What unique themes, dimensions and factors emerge from the JSPE

Nursing Student Version R scores?

3.   To what extent do predictor scales of the Nursing Student Empathic

Communication Questionnaire (a) academic exposure to patient care situations, (b)

curricular emphasis during the nursing program, (c) perceived program effectiveness, and

(d) academic sources predict nursing student's orientation or attitudes toward empathy in

patient care as measured by JSPE Nursing Student Version R total scores?

4a.   To what extent do nursing program components (program effectiveness,

curricular emphasis, academic exposure, and academic sources) predict student's

perceived competence to empathically communicate with patients and families as a result

of their nursing program instruction?

4b.   To what extent does orientation or attitudes toward empathy in patient

care (JSPE Nursing Student Version R total scores) contribute to the prediction of

perceived competence above and beyond program components?

II. LITERATURE REVIEW

Baccalaureate nursing program educators are faced with intense expectations from many stakeholders, such as patients, students, academic accreditation communities, and healthcare administrators, to produce graduates that can enter their professional practice with a high degree of skills and competence (AACN, 1998; Standards for Accreditation of Baccalaureate and Graduate Nursing Programs, 2003). These demands have led to a need by nursing institutions to prepare students to (a) fulfill the role and critical competencies for professional nursing practice, and (b) establish ways by which the achievement of these goals can be evaluated and refined to promote the integrity of the institution and advance the nursing profession (AACN, 1998).

Broadly defined within the context of professional nursing education, the role of the nurse includes (a) providing care, (b) designing, managing and coordinating care, and (c) functioning as members of a profession (AACN, 1998). The role component encompassed in the purpose of this study involves the ability of the nurse to form partnerships with patients, communicate with the patient, and advocate and teach patients (AACN, 1998). This aspect of communication is contained within the core competency of communication (p. 9), and includes the use of therapeutic communication as a means to elicit and clarify patient preferences and values. Other core competencies include assessment, critical thinking, and the performance of technical skills (pp. 9-12). All skill

bases can be expected of new nurses at the time of graduation from baccalaureate-degree nursing programs (p. 2).

Empathic communication skills are critical to providing high-quality nursing care to patients in an attempt to holistically understand the patient's perspective. These skills pertaining to therapeutic communication must include evidence that the student: (a) demonstrate communication skills during assessment, intervention, evaluation, and teaching, (b) adapt communication methods to patients with special needs, such as psychological or sensory disabilities, and (c) use therapeutic communication within the nurse-patient relationship, and elicit and clarify patient preference and values (AACN, 1998, p. 10). This clarification process of patient preferences and values involves the ability of the nurse to understand the patient's perspective and communicate this understanding, both of which involve empathic ability.

One method by which nursing institutions ensure achievement of both institutional and professional standards is through the process of accreditation. Accrediting agencies consider the program's mission, goals, and expected outcomes to determine the quality of the program and the educational preparation of members of the profession or occupation (Standards for Accreditation for Baccalaureate and Graduate Nursing Programs, 2003). The Commission on Collegiate Nursing Education (CCNE) is an accrediting agency that serves stakeholder's interests by assessing and identifying programs that engage in effective educational practices. Institutions that seek CCNE accreditation of their baccalaureate programs seek ways in which to improve and enhance educational programs for professional students by assuring that nursing program

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outcomes adequately prepare students for professional practice (Standards for

Accreditation of Baccalaureate and Graduate Nursing Programs, 2003).

There are four standards utilized by CCNE to determine program outcomes.

These standards of program quality, numbered I-III, include mission and governance,

institutional commitment and resources, and curriculum and teaching-learning practices.

Standard IV is program effectiveness: student performance and faculty accomplishments.

The driving assumption of this study is based upon the premise that nursing program

quality of the didactic and clinical teaching-learning practices and learning environment

(CCNE accreditation Standard III-E) should support the achievement of positive student

learning outcomes. Research studies, as discussed in this literature review, have posited

that attitudes and perceived competence contribute to supportive evidence of attainment

of positive learning outcomes.

In order to examine the possibility of a relationship between student perception of

program effectiveness in teaching them to empathically communicate (a) attitudes toward

patient care, and (b) competence to empathically communicate as a result of nursing

program instruction, there needs to be appropriate measures of attitudes and competence.

Feedback from students, as stakeholders in nursing programs, provides valuable

information regarding attitudes and competence through the use of instruments that

measure student attitudes toward empathy in patient care and the use of instruments that

measure perceived competence as a result of effective nursing program instruction. This

information contributes to holding programs accountable and ensuring that outcomes are

appropriate in preparing students to fulfill their nursing role upon graduation. This

student feedback solicitation leads to the four research questions that define the purpose of this study.

In this chapter, literature is related to the purpose of the study, integrating the broad themes of the independent variables. These include fulfilling the critical competencies for professional nursing practice in the interface between empathy and empathic communication as part of therapeutic communication, and the didactic and clinical teaching learning practices used by programs to support the achievement of student learning outcomes. The final sections of this chapter relate the independent variables to the dependent variables or outcome measures of: (a) attitudes toward empathy in patient care, and (b) perceived competence to empathically communicate with patients and families as evidence toward the achievement of these student learning outcomes.

Health care researchers who have published studies on therapeutic communication within the nurse-patient relationship have included elements of empathy and empathic communication. To understand the different aspects of teaching empathic communication, three premises must be critically analyzed. These include: (a) the definition of empathy, (b) the role of empathy and empathic communication in patient care, and (c) how empathy is taught, which includes didactic and clinical teaching and learning practices. This section of the literature review is organized around these central tenants in terms of how empathy and empathic communication encompass elements of therapeutic communication and how the knowledge and skills obtained in nursing programs are used to fulfill the role and critical competencies for professional nursing practice.

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Empathy

There is no specific agreement on the definition of the concept of empathy.

Kunyk and Olson (2001) suggest that conceptualizations of empathy are incomplete and

need further enrichment. Unfortunately, this lack of agreement of a definition and

congruent conceptualization of empathy has hindered the advancement of the concept

(Hojat, 2007; Kunyk & Olson, 2001; Morse et al., 1992; Yardley, 1999), and presented

theoretical and methodological challenges (Alligood & May, 2000; Hodges, 1991; Kunyk

& Olson, 2001; Yegdich, 1999).

The origin of the word *empathy* dates back to the 1880s from a translation of a

German word, *einfuhlung*, which is used to describe the emotional appreciation of

another's feelings (Hardee, 2003; Hojat, 2007). Most historical trajectories of the concept

of empathy stem from the works of the founder of client-centered therapy, Carl Rogers.

Rogers defined empathy as "the ability to sense the client's private world as if it were

your own without ever losing the 'as if' quality" (Rogers, 1957, p. 95). Later, in 1975,

Rogers replaced the "as if" you were in the other person's shoes to "being in" the other

person's shoes.

Definitions of Empathy

Empathy is defined as the ability for another human to understand another's

perspective or "put themselves into another's shoes" so they can feel the way another

person does in regard to a particular situation or problem (Olson, 1995; Price &

Archbold, 1997). Empathy is also further broadened to include the ability to perceive and

reason coupled with the ability to communicate understanding of another's feelings and

attached meanings. A research team at Jefferson Medical College proposed a definition

of empathy in the context of patient care in promoting positive patient outcomes (Hojat, 2007; Hojat et al., 2002, 2003, 2004). This definition underscores the significance of three key ingredients in the definition of empathy: (a) cognition, (b) understanding, and (c) communication. Hojat (2007) describes empathy as "a predominantly cognitive (rather than emotional) attribute that involves an understanding (rather than a feeling) of experiences, concerns, and perspectives of the patient, combined with a capacity to communicate this understanding" (p. 80). Hojat (2007) further cites the need for a distinction to be made between "cognition and emotion, understanding and feeling, and empathy and sympathy" in the conceptualization of empathy in patient care (p. 3).

LaMonica (1981), a nurse educator and researcher, defines empathy as "a central focus and feeling *with* and *in* the client's world. It involves accurate perception of the client's world by the helper, communication of this understanding to the client, and the client's perception of the helper's understanding" (p. 399). Benbassat and Baumal (2004) utilize a multiphase process to define empathy. This includes the beginning phase of gaining an insight to patient's concerns, feelings and sources of distress, followed by engagement, which includes identification with those feelings. This in turn produces compassion, followed by a desire to alleviate the cause of distress in the patient.

Stepien and Baernstein (2006) utilize a vernacular definition in the clinical context that work together to achieve patient benefit. The aspects of empathy in the clinical setting include: (a) emotional components, (b) cognitive, (c) behavioral, which include the ability to convey understanding and perspective back to the patient, as well as (d) moral components. The addition of moral components draws upon the physician's internal motivation to empathize. Rudebeck (2000) echoes the view of empathy as

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possessing affective and cognitive elements as feelings always have the concrete aspect of referring to something that the patient is experiencing. When emphasizing the role of empathy in diagnosing and understanding the patient and their illness, Rudebeck posits that "there is nothing more real, nor more important than that which the patient wants to tell" (p. 18).

Kunyk and Olson (2001) provide exemplars of the discrepancies that prevent the concept of empathy from being fully mature and useful to the nursing profession. The quest to identify empathy-related variables in which to build theory to advance the concept and advance the scientific base for the nursing profession was identified and addressed earlier by Forsyth (1979). The existence of five conceptualizations, spanning the works of 22 theorists, highlights the vast variety of perspectives, patient outcomes, process, and measurement methodologies that embody the concept of empathy.

Through extensive literature searches, Kunyk and Olson (2001) posit that there are five conceptualizations of empathy: (a) a human trait, (b) a professional state, (c) a communication process, (d) as caring, and (e) as a special relationship. The majority of authors and researchers on empathy embrace the first three conceptualizations. Empathy as caring and empathy as a special relationship are less prevalent in the literature. Authors embracing empathy as caring depart from the desired outcome of the patient being understood, and focus on nursing interventions that meet the patient's needs. Empathy as a special relationship focuses on the mutuality of an emerged friendship between the nurse and patient to meet patient goals. This friendship provides a critical element in nursing roles with hospice patients, where there is a reconciliation of needs and vast coping requirements associated with the terminal nature of conditions.

Empathy as a Human Trait

In conceptualizing empathy as a human trait, empathy is seen as an innate natural ability. Researchers that ascribe to this conceptualization acknowledge that empathy cannot be taught, but rather once identified, empathy can be reinforced or refined. Authors in this category focus on the accurate perception of other's feelings and situations, and understanding what this means for the other person. An author that ascribes to these beliefs is Alligood (1992), who posits that there are two types of empathy, labeled "basic" and "trained." "Basic" empathy is seen as a human attribute, and is likened to natural or ordinary feelings for others. This empathy is involuntary and cannot be taught, but can be reinforced to develop empathic expertise. Alligood and May (2000) describe the second type of empathy as "trained", which is a clinical skills state utilizing the interpersonal process.

Another author who shares the view of empathy as a human trait is Morse et al (1992). These authors discuss the level of the nurses' engagement as being determined by two broad characteristics, which include whether the nurse is focused on the patient's response or focused on protecting him/her self from experiencing the patient's suffering. The second characteristic includes whether an empathic response is at the first level, which is spontaneous or reflexive, or at the second level, which is learned.

These authors describe the human responses of the nurse at the first level requiring emotional insight to the feelings of the suffrage of the patient. Of critical import is emotional involvement, where the caregiver is willing to identify and experience the other's pain and suffering, which requires enormous emotional energy.

Empathy as a Professional State

Empathy as a professional state varies from the view of empathy as a human trait in that it comprises both cognitive and behavioral components, and is envisioned as a learned communication skill. In essence, the nurse deliberately chooses the best response to convey understanding to the patient, while maintaining objectivity to emotional involvement with the patient. Alligood and May (2000) address the prevalence of empathy studies on the trained type, which utilizes the interpersonal process with the patient. In essence, understanding empathy expands beyond mere use of appropriate words, rote trained responses, or behavioral skills acquisition. Alligood and May (2000) state the need for a new approach that focuses on basic empathy and the use of the intrapersonal process to connect with the patient's feelings and consequently provide understanding of self and others.

Price and Archbold (1997) describe the process of individuals viewing the world according to their own beliefs, experiences, value systems, and cultural backgrounds. In light of this conceptualization, the authors posit that there should be a communication process that develops when individuals mature cognitively and emotionally as one becomes more self-aware. Therefore, the development of empathy is a life-long process that can be enhanced by teaching of self-awareness skills, in combination with one's natural ability.

Empathy as a Communication Process

Empathy as a communication process is outcome-based, where the patient feels understood as a result of the nurse perceiving the patient's situation and subsequently expressing this understanding. Thus, the patient feels understood and thereby perceives

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the nurse as empathic. This conceptualization of empathy holistically includes aspects of the aforementioned types of trait and professional state. Empathy as a communication process combines innate abilities of the nurse, awareness of patient's feelings, and learned ways to respond that benefit the patient.

Baillie (1996) emphasizes this closeness-empathy link as aligned with "getting to know" the patient, which is also a stressful component to the empathic relationship. The nurse's ability to empathize with patients is related to such aspects as previous experience, knowledge about people, and personal and professional experience. This process of the patient being understood has also been described in the context of "being known" (Thorne et al., 2005), as presented through predominant themes utilizing patient's perspective of the dynamics of the human connection between medical physicians and cancer patients. "Being known" involved communication and acknowledgement by the healthcare provider of the patient's personal and situational uniqueness. Subtle and overt cues from healthcare professionals consisted of eye contact, sitting instead of standing, feelings of unrushed demeanor by the professional, and remembering one's personal name. A common element was the ability of the healthcare provider to understand the patient's perspective of the difficulties associated with their cancerous condition. Verbal communication was important in this study, through producing variance in the benefit of non-clinical conversation and physical touch.

Related Concepts

In understanding the concept of empathy, the process of differentiation from related concepts functions to clarify components that are similar. Among the concepts collectively termed as empathy are sympathy, pity and compassion. Related concepts,

although containing subtle differences, are often confused or erroneously conceptualized as interrelated with empathy. This differentiation between concepts varies in the way the nurse or healthcare provider communicates with the patient or family and in the way the patient responds.

Sympathy is emotional identification with the patient's plight, which evokes responses of the nurse such as feeling sad, teary eyed, emotionally fatigued, and feelings of loss in response to another's loss (Morse et al., 2006; Stepien & Baernstein, 2006; Yegdich, 1999). By contrast, empathy does not depend on having these congruent feelings. Differentiations between empathy and sympathy include the element of sympathy involving compassion and shared emotions with patients, and empathy involving passion and shared understanding (Hojat et al., 2002; Spiro, 1992). Spiro (1992) further addresses the distinction between the concept of sympathy that means "I want to help you", and empathy that means "I could be you" (p. 843).

The role of sympathy as requiring a reasonable distance to maintain emotional balance is contrasted in the literature. Stepien and Baernstein (2006) note physicians who share their patient's feelings can experience adverse affects, such as lack of objectivity and emotional fatigue. Hojat (2007) describes the joining of patient emotions as in sympathy as potentially impeding clinical outcomes. In contrast, empathy "disentangles" the individual and enhances clinician's performance in a linear manner and needs no restraining boundaries (Hojat et al., 2003).

However, Morse et al. (1992) discusses how sympathy (along with pity, consolation, and compassion) serves a useful function as a first-level response that naturally comforts the patient. These authors posit that the loss through nursing programs

of this first-level response has negatively impacted the efficacy of nursing care. Appropriate amounts of expression of sympathy, that are perceived as genuine and approximate the patient's true feelings, can enhance care and demonstrate acceptance of the patient's state. Additionally, sympathy serves a role in moving the sufferer from the state of misery and into a position of "taking it" (p. 814).

Sympathy should be further distinguished from the related concepts of pity and compassion. Pity is an expression of regret or sorrow for one who is suffering, distressed, or unhappy. Pity confirms the sufferer's state, which hastens the adjustment period and allows the patient to attain comfort sooner (Hardee 2003; Morse et al., 2006). Compassion is a strong emotion or sentiment that is stimulated by the presence of suffering and that evokes a recognition and mutual sharing of the pain and despair of the sufferer (Morse et al., 2006).

Role of Empathy and Empathic Communication in Patient Care

The role of empathy and empathic communication in patient care embody the perspectives of both the nurse and the patient. Studies related to the expression of empathy from the nurse, such as establishing a relationship through contact with the patient, are described. The outcomes, predominately shown through expressions of patient satisfaction, are illustrated through studies involving patients with complex needs.

There are many researchers that posit that empathy is an important ingredient in the helping relationship, is the foundation of understanding patient's needs, concerns and emotions, and is fundamental to the nursing practice (Freshwater & Stickley, 2003; Kunyk & Olson, 2001; Lauder et al., 2002; Reynolds & Scott, 2000; Thorne et al., 2005). Baillie (1996) conducted phenomenological research on the nature of empathy from the

nurses' perspective in order to gain an understanding of the experience of empathy. Using interviews with surgical nurses, the nurses described the nature of empathy as multifaceted and influenced by complex relationships between the nurse, the patient and the environment. The results of the study found responses of the nurses clustered around seven main themes, which detailed the relationship of closeness and involvement in empathy, empathy as active and therapeutic, empathy as an individual and personal experience, developing the ability to empathize, discussing when empathy is difficult, and developing empathy with the individual patient (p. 1302-1304). Empathy as a therapeutic response was inferred to the patient "through touch, eye contact, tone of voice, giving time, and sitting at the patient's level" (Baillie, 1996, p. 1303). Other researchers (Charon, 1993; Benbassat & Baumal, 2004; Bowles et al., 2001; Reynolds & Scott, 2000; Spiro, 1992) have echoed this response in patients. Additionally, experience was identified as a key factor in developing empathy, as derived from the nurses' own personal experiences, previous nursing experiences, and insight through significant other's similar experiences. The role of effective communication and formulating a good relationship with the patient was instrumental in the ability of the nurse to empathize.

Non-verbal behavior, as studied by Caris-Verhallen et al. (1999), resulted in the occurrence of non-verbal communication between nurse-elderly patient interactions. Through the use of video-taped nurse-patient communication, there were six non-verbal behaviors observed, which included patient-directed eye gaze, affirmative head-nodding, smiling, leaning forward, affective touch and instrumental touch. Except for instrumental touch, non-verbal behaviors were found to be important in establishing a good

relationship with the patient. The predominant behaviors the nurse exhibited were eye gazing, head nodding and smiling to establish a good relationship with the patient.

In terms of patient outcome measures, effective empathic communication is widely regarded to be a key determinant of patient and family satisfaction, by showing and providing understanding, comfort and support (Haidet & Paterniti, 2003; Hardee, 2003; Kruijer, 2000; Platt & Platt, 1998; Thorne et al., 2004). From a patient's perspective, there were several factors that contributed to patient perception of nursing care delivery that inhibits or enhances care delivery. Irurita (1999) describes levels of care, as described by patients participating in a qualitative study, containing elements of "soft-hand" and "firm-hand." "Soft-hand" includes the highest level of care to preserving integrity. "Firm hand" refers to technically competent clinical care (not demonstrating feeling or compassion). Factors that were found to enhance perceived quality of care were those elements attributed to "soft-hand" care, which also included establishment of an effective nurse-patient relationship. Study results emphasized the positive results of spending sufficient time with the patient to establish and nurture the relationship, continuity of contact between the nurse and the patient, and the nurse possessing personal attributes of compassion and empathy.

Reynolds and Scott (2000) posit that empathy is crucial to the fundamental aim and achievement of nursing goals. Through an extensive literature search the authors establish the following aspects of empathy to nursing. These findings indicated that empathy (a) enabled nurses to create a climate of trust and to establish their client's perceptions of need, (b) enabled nurses to judge the client's state and readiness to talk, (c) is needed in order that nurses can understand the origins and purposes of client's

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responses to health problems, (d) facilitated positive health outcomes for clients, among

which are reduction of anxiety, depression, and physiological distress. The achievement

of outcomes is dependent upon the ability of the nurse to offer high levels of empathy to

clients (p. 231).

Improved clinical outcomes have been linked with empathic care, such as better

recovery, improved healing, fewer malpractice suits and litigations (Fields et al., 2004),

and an overall positive perspective of patient care (Butler et al., 2005; Chant et al., 2002;

Platt & Platt, 1998; Reynolds & Scott, 2000). Thorne et al. (2005) describes the impact of

poor or ineffective communication on cancer care patients, and extends beyond "bad

manners" and encompasses a number of untoward effects related to the effectiveness of

clinical encounters. The authors describe the "informational context" consisting of

significant misunderstandings by patients regarding their disease, or the seriousness of

their clinical situation. The "clinical context" related to communication is increased fear

and anxiety, and decreased patient satisfaction with care and unnecessary psychosocial

distress.

Platt and Platt (1998) described the influence of the healthcare provider's

understanding of the patient's concerns and values, though the patient might not make

these concerns obvious nor express them clearly. The authors further address obstacles

encountered by medical students in expressing and possessing empathy, such as there

being people with whom you cannot empathize, fear or perplexity of what to say after an

empathic reflection with a patient, fear of opening the floodgates after a display of

understanding, and trouble working with angry patients.

Didactic and Clinical Teaching-Learning Practices of Empathic Communication

Nursing educators utilize many pedagogical methods to didactically teach empathy and empathic communication. Among these methods explicated through the works of nursing and medical educators are theoretical lectures from faculty members, role playing, patient-actors, journal reflections, discussions, modeling, and the recent insurgence of technological advancements through computer-assisted programs. These methods are used independently or in combination to produce various outcomes in student learning. Efficacies of methods are discussed and suggest various levels of success in yielding empirical evidence of producing more empathic behavior in nurses.

Modeling

Just as there are individual uses of components used in training, there are also variations and combinations of multiple components, such as demonstrated in the research performed by deLucio (2000). Means for training in this study were instruction, combined with modeling and modeling with feedback to create an environment where the participants would perceive their own feelings as well as each other's. The outcome variables were communication skills measured under simulated conditions using a variety of instruments. This study showed that the training program in communication and techniques of emotional self-control as a whole improved when the nurse was presented with communication with families of seriously ill patients. In particular, there were improvements by the nurse in listening skills, empathizing, and coping with emotions.

Various combinations of modeling, labeling, and rehearsal were used to teach empathy to four experimental groups of baccalaureate junior- and senior-level nursing students (Layton, 1979). Rehearsal was the only effective condition in the study.

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Directions for future research posed whether or not the use of negative examples to enhance learning would be advantageous. Based on the findings of this technique, the study suggested the need to introduce the learning of interpersonal skills early in the student's education, such as the junior year of nursing school.

Technological Techniques

Congruent with Hodges (1991), the authenticity component of clinical experiences can be enhanced through the use of technological means that afford the student the ability to practice and develop skills in a safe and controlled environment under direct supervision. Woolley and Jarvis (2007) purport the use of DVD, CCTV, and digital recording technologies to support these skills, when applied within a framework, such as a cognitive apprenticeship model. Woolley and Jarvis proffer utilizing a combination of four elements: didactic training, role-playing, experiential training, and a role model of empathy. Hodges (1991) aimed to examine the development of empathy in student nurses. In this study, there were two groups of students participating in two training experiences (empathy and psychological-mindedness), but in different order. The psychological-mindedness group received lectures and discussions containing elements of patient perceptions, stereotypes, expectations and communication. Video-tapes of nurse-patient communications were played and stopped periodically, and students were asked to respond in writing and verbally. Students competed with each other to give the most empathic response, as they were immediately given feedback as to what the ideal response would entail by the researcher. Student's specific ability with patients was video-taped and their performance rated by the patients using an assessment instrument. The results of the study posited that empathy was neither increased nor decreased.

Kruijver et al. (2001) described results of research regarding communication

skills of nurses during interactions with simulated cancer patients. Admission interviews

between 53 ward nurses and simulated cancer patients were video-taped and analyzed

using the Roter Interaction Analysis system. The results showed that the nurses

predominately used instrumental communication with patients, which centered on

providing information about medical topics. Structuring behavior and behavior that

involved the patient during the conversation were rarely used. Predominate use of closed

questions did not contribute to affective behavior that would indicate empathy, concern

and optimism. The authors cite the use of simulated patients as instrumental in providing

feedback commonly associated with patients in actual settings.

Combination Approach

In a study with medical residents, Laidlaw et al. (2006) found that residents who

underwent prior communication skills training significantly outperformed those who did

not. The use of multiple interventions, mix of teaching methods and clinical placements,

self report and patient assessments demonstrated improvements in reinforcing positive

attitudes and beliefs needed to effectively prepare the nurse for psychosocial and

emotional patient-care situations (Gysels, Richardson, & Higginson , 2004; Steginga et

al., 2005; Thorne et al., 2004). Laidlaw et al. (2006) found stronger evidence for the

value of prior communications skills training, new evidence of a strong relationship

between communications skills proficiency and clinical knowledge application. Prior

communication skills training supported the interpretations by the authors that patient-

doctor communication can be taught, learned and retained with appropriate training

(p.23). The combination approach used video-taping and a structured clinical

examination with four patient scenarios. These scenarios were focused on delivering bad news, handling anger, determining reasoning for non-compliance, and handling sensitive information compassionately.

Steginga et al. (2005) reported improvements in the outcome variables consisting of attitudes toward and perceived skills in the psychosocial care of patients with cancer and their families, knowledge about cancer and cancer nursing, preparedness for cancer nursing, and participant's perceptions of course effectiveness through use of a combination of teaching methods. This study utilized small group learning, didactic and interactive approaches, and clinical placements to note improvement in nurse's scores. The nurses' self-report of course effectiveness showed mean scores of 4.43 on a 5-point scale (high effectiveness) in the nurse feeling more confident in caring for people with cancer, and a mean score of 4.73 in meeting educational and learning needs. Gysels et al. (2005) found best results from training methods that were (a) carried out over a longer period of time, and (b) that were learner-centered using several methods combining a didactic approach focusing on theoretical knowledge with rehearsal and feedback from peers to be effective, particularly with training nurses to care for cancer patients.

Artwork and the Humanities

Pedagogical approaches have been researched by which nursing students were encouraged to use their imagination and personal knowledge of empathy with the use of visual artwork and the humanities. One study by Wikstrom (2001) consisted of the interpretations and observations of a reproduction of Edward Munch's "The Sick Child", which included problem solving (written reports) and reflection (small-group dialogues) in terms of empathy. The pedagogical approach that served as the framework for

Wikstrom's study was VanManen's model, which stresses (a) the learner's possession of a great volume of experience prior to entering an educational experience, and (b) that student learning is obtained more from discovery than information delivery. The visual arts of the reproduction of "The Sick Child" served to actively elicit from the student prior experiential knowledge, which can lead to reflection and problem solving. This approach resulted in lively discussions from the students as to both artwork interpretation of empathy expressed by the child and the mother in the painting (atmosphere, tone, emotion of the mother, emotion of the child, sympathy versus empathy), and similar ambiguous clinical practice situations they had experienced.

Smyth (1996) posed the question, "In what ways may the experience of art contribute to the understanding and development of empathy in the nurse-patient relationship?" (p. 936). The author describes the role aesthetic experience has having several implications to nursing practice, which include (a) allowing the nurse to gain specific insight to another's perspective, (b) inviting the nurse to step outside of the normal frame of reference, (c) helping to better understand the needs and contexts of clients from diverse cultures, (d) promoting freshness, spontaneity, and optimism, (e) helping deal with uncertainty and indeterminacy, (f) invoking a sense of unity, and (g) enhancing empathic capacity. Empathic capacity is obtained by the nurse incorporating aesthetic experience and the arts from a personal perspective, and then using that self-awareness to create a larger view of the nurse-patient relationship.

Poetry

Also drawing upon literature-based humanities, Shapiro et al. (2004) conducted a study using first-year medical students to assess whether reading and discussing poetry

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and prose related to patient and doctors could significantly increase medical student empathy and appreciation of the relevance of the humanities for their own professional development. The format of the class consisted of on-site readings of poetry, skits and short stories that emphasized understanding of the perspectives of the patient, family members, physician, and personal beliefs when pertaining to topics of doctor-patient relationship, physical examination, listening to patients, pain, sexuality, cross-cultural issues, lifestyle modification/noncompliance and geriatrics. This study found significant improvements in empathy, particularly in a more detailed and complex understanding of the patient's perspective, as well as an increase in student acknowledgement of ways to incorporate reading literature to help with training-related stress. Through qualitative analysis, students in this study expressed ways in which literature and the focus on the humanities had served to change their perspective. These aspects included understanding patient's feelings about their daily lives in coping with illness, and contributed to their heightened need for personal expression of feelings, as well as listening to those of their patients.

Drama

The use of drama was found to be successful in teaching first-year medical students about empathy and compassion, especially regarding an end-of-life patient scenario (Deloney & Graham, 2003). The true-story drama, entitled "Wit" was regarding a 50-year old women suffering from Stage 4 ovarian cancer, and who was undergoing experimental treatment at a major teaching hospital. This drama was shown following a pre-play lecture on end-of-life care, and followed by a post-play discussion with the cast. Students were asked to complete a survey containing items regarding pedagogical utility

of teaching understanding patient perspectives with end-of-life issues, as well as the

degree in which they felt "emotionally moved" and their present skill with dying patients.

The authors found this technique effective for students that had some clinical

experience, though early in the curriculum, because it created a thoughtful, safe

environment where the students could allow themselves to feel the full range of emotions,

such as anger, tears, or silence. Student response to questions regarding "Preferred the

play to didactic lectures on end-of-life care", and "Preferred play to reading journal

articles" were 78% and 74% respectively.

Focus on Therapeutic Communication Skills

Other methods have included the observation of students with real patients, and

have utilized self-assessments, psychometric tests, and rating scales of observed behavior

during patient encounters and simulation training (Benbassat & Baumal, 2004; Butler et

al., 2005; de Haes et al., 2001; Kreuijver et al., 2000; Makoul, 2006; Stepien &

Baernstein, 2006). Short-training courses in solution-focused brief therapy skills have

also been utilized to examine the extent to which these short training courses affected

nurses' communication skills and improved feelings of competence and willingness to

engage in patient interactions (Bowles et al., 2001; Butow, 2005).

Holm and Aspergren (1999) performed comparative analysis on medical students

regarding teaching that was organized traditionally with lectures and clinical classes and

those where other pedagogical methods were used, such as problem-based learning, small

group seminars, and integrated communication skills. The role of the student's own

active search for knowledge in addition to pedagogical techniques was emphasized in this

study. These researchers concluded that a pedagogical mode of teaching that centers on

the role of the student's own active search for knowledge and self expression of clinical

experiences counteracts development of rigid responses to clinical encounters with

patients that is harmful to both the student and the clinical situation in empathic ability.

Pedagogical techniques that focus more specifically on training students in the

detection of the patient's concerns has been shown be an effective and teachable skill,

resulting in long-term changes in communication behaviors of physicians, and retained

effectively with appropriate training (Benbassat & Baumal, 2004; deLucio et al., 2000;

Haidet & Paterniti, 2003; Haq, 2004; Laidlaw et al., 2006; Makoul & Schofield, 1999).

Most notably, Makoul (2003) utilized video footage of verbiage from patients, called

Patient Narrative Videos, as a trigger film for discussion with medical students of

difficult patient situations, such as chronic pain, diabetes, and manic-depression. These

trigger films were designed to lend perspective directly from the patient as to

confirmation of the large and small details and challenges of their everyday lives with the

illness.

Difficult Patient Situations

The use of role play and subsequent student reaction has been used as a method to

teach difficult patient perspectives such as end-of-life skills, breaking bad news,

managing pain, and discussing advanced directives (Butler et al., 2005; Torke et al.,

2004). Torke et al. (2004) utilized reader's theater, which involves the use of a script that

depicts a patient's experience to engage learners in meaningful dialogue regarding the

illness. The discussions by the students were led by faculty members and focused on the

reactions of the student to the character's behavior. This technique was also used with

pain management scenario role plays, breaking bad news, such as cancer diagnosis with

patients, and advanced directives role plays. The majority of student responses indicated that these techniques enhanced their understanding of how to address these topics with patients, as well as improved their perception of preparation for the clinical skill.

Beckman and Frankel (2003) further delineate unique empathic communication skills related to cancer care that differ in varied communities and includes delivering of bad news, effectively working with families, encouraging truly informed choices, facilitating the transition to palliative care, honoring end-of-life requests, grief work, and personal awareness. Differentiation between role playing, which involves the learner drawing upon their own experiences with difficult situations (Back et al., 2003), has been effectively used and possesses many advantages to the simulated patient technique (Kruijver et al., 2001).

Challenges to Educators

Increased demands from patients underscores nursing school educators' need to determine which patient care situations necessitate advanced empathic communication skills. Common content areas requiring empathic communication proficiency include psychosocial issues, breaking bad news, patients from diverse cultural backgrounds, bereavement, problem situations, sexual issues, pain, anxiety and injury (Butler et al., 2005; Haq et al., 2004). Communication with patients and family members described as "rude, hostile or difficult" represent difficulties and challenges inherent in empathic communication, as well as nurse-patient encounters that include a sincere dislike for a patient, lack of point of reference to the particular experience (such as a male nurse empathizing with a pregnant patient), blaming of the patient for his or her condition, and the nurse thinking that the patient is responsible for the clinical condition, such as a

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smoker with lung disease (Platt & Platt, 1998; Rudebeck, 2000), and disabled patients (Chant et al., 2002).

Chant et al. (2002) identified eight problems in communication skills teaching that hampered nurse educators. Among these are shortages of nursing training and the variations of course content, timing, duration and assessment. Additionally there were shortages of communication skills training with certain groups of patients in the clinical areas coupled with poor evaluation of the course outcomes. There were also challenges built into curriculum and policy that threaten the effectiveness of programs that teach empathic communication. Haq et al. (2004) posits that among these challenges to educators are (a) communication skills may be devalued and not considered teachable; (b) teachers and students may assume skill will automatically improve with experience; (c) expectations of teaching and evaluation methods may be vague or inconsistent among different faculty and throughout courses; (d) skills introduced in pre-clerkship years are not applied or evaluated in clerkships; (e) resources and time are insufficient to teach and evaluate skills; (f) improving communication skills requires faculty and students to possess self-awareness, interpersonal sensitivity, and the willingness to be self-reflective and accommodating; (g) few faculty have received formal training in communication skill teaching and evaluation; and (h) the presence of inconsistent feedback from faculty resulting in confusion among learners.

Haq et al. (2004) describes the uniqueness of communication skill teaching which contains challenges to both student and teacher. Students must possess self-awareness, sensitivity to the needs of other, the capacity for critical self-reflection, the ability to detect their own biases, and openness to make changes based on patient concerns and

cues. However, ignoring hints of patient's and families' concerns can involve mediating variables, such as embarrassment of the student to express themselves emotionally, or failure to detect verbal and nonverbal cues from the patient of anxiety or depression (Benbassat & Baumal, 2004).

The consequences of failure of nurse educators to train nursing students to effectively empathically communicate extend beyond negative patient care, poor patient outcomes, and negative health care experiences by the patient (Butler et al., 2005; Reynolds et al., 1999), and impact student development. Consequences of inadequately prepared students in communicating effectively with patients include student development of feelings of frustration, helplessness, anxiety, uselessness, and guilt, which can place an emotional toll on the student (Rowe, 2003).

Outcome Measures of Achievement of Student Learning Outcomes

Measurement of Empathy

An important step towards the advancement of empathy as a concept is through empirical contributions that measure empathy. Student orientations or attitudes toward empathy with typical patient situations encountered during nursing school also necessitate development and validation of empathy measurements. Measurement of empathy is important to nursing because it is difficult to perform research that is useful to practice, research and education if the concept is inadequately defined (Alligood & May, 2000; Hojat, 2007; Hojat et al., 2003; Kunyk & Olson, 2001; Reynolds & Scott, 2000). It is also difficult to advance the concept of empathy past the current state if further enhancement on the conceptual work is not performed (Kunyk & Olson, 2001).

Instruments designed to measure empathy fall into three groups (Fitzpatrick et al., 2004; Reynolds & Presley, 1988). The types of approaches include self-rating scales, ratings by expert judges or colleagues, and client/patient ratings. Reynolds et al. (1999) describe the importance of the use of patient views, described as the client, in determining which elements of empathy are the most relevant to therapeutic helping, and which components contribute the most to therapeutic outcomes. These authors assert that in order to assess the nurse's empathic ability, there must be a measurement reflecting the patient's views of what they feel the nurse ought to be doing.

Measurement of empathy has reflected the need for research of both practical and theoretical value in defining empathy and empathic behavior (Hogan, 1969; Hojat, 2007; Hojat et al., 2002a, 2002b, 2003, 2004; Reynolds et al., 1999). Examples of four empathy scales commonly used with healthcare professionals include the Empathy Construct Rating Scale (LaMonica, 1981), the Interpersonal Reactivity Index, (Davis, 1983; 1994), the Layton Empathy Test (1979), and the Jefferson Scale of Physician Empathy, Versions S, R, HP (Hojat et al., 2001, 2002a, 2002b).

The Empathy Construct Rating Scale was developed by LaMonica (1981), a nurse, for specific situations encountered in nursing. This scale has been used frequently as a self-rating scale to quantify empathic behavior. Performance of factor analysis concluded that it measured empathy as a single trait (Gould, 1990). This scale consists of 84 Likert-type items about the respondent's actions toward another person or the respondent's feelings. Questions range from "well-developed empathy" to "lack of empathy." The results on construct validity of the ECRS suggested that the theoretic construct of empathy was not generalizable, and empathy cannot be divided into

subscales because it exists as a whole and all elements need to be present in helpers for empathy to exist.

The Interpersonal Reactivity Index (IRI) was developed to measure individual differences in empathy (Davis, 1983). This instrument contains 28 items, from four components of empathy containing both cognitive and emotional domains. There are four sub-scales with 7-items which include perspective taking, empathic concern, fantasy and personal distress. Perspective taking refers to the cognitive tendency to see things from another's point of view; empathic concern is the respondent's tendency to experience feelings of warmth, compassion and concern for others. Fantasy scales refer to the cognitive tendency to transpose one's self imaginatively into feelings and actions of fictitious characters. Personal distress is an affective measure of self-oriented feelings of unease in tense, interpersonal settings (Becker & Sands, 1988). As reported by Davis (1983), the IRI subscale scores correlate positively with Hogan's Empathy Scale in the Perspective Taking subscale ($r = 0.40$), and the highest negative correlation was found on the Personal Distress subscale ($r = -0.33$).

The Layton Empathy Test (1979) is a cognitive test of principles of empathy that was used to study the use of modeling to teach empathy to nursing students. Consisting of two forms, each form consisted of 12 True/False and two multiple choice items. Learning of empathy was measure by the written test, and the students were additionally evaluated by use of the Carkhuff Empathy Scale and the Barrett-Lennard Relationship Inventory. As reported by Layton (1979), reliability coefficients were low, ranging from .24 to .26. The implications from Layton's study suggested the need to introduce the learning of interpersonal skills early in nursing education, as senior nursing students did not benefit

from this study. Congruent with Layton's study from a student-teaching perspective, Mangione et al. (2002) described the need for an operational measurement of physician empathy as being useful to medical educators to determine whether empathy could change at various levels of medical education. This study found that an empathy measure could serve educators by providing utility to assessment procedures that require vast resources, such as time, expense and are largely subjective in nature.

Recognizing the need for an empathy measurement instrument that was designed for empirical investigations on the development of empathy among students and practitioners, the Jefferson Scale of Physician Empathy (JSPE) was originally designed for use in medical students, then modified to be used in practicing physicians and other health care professionals (Hojat et al., 2002a, 2002b, 2003, 2004). Hojat (2007) describes the development of the framework for the instrument development as comprising initial comprehensive review of the literature on the concept of empathy to identify theoretical views, and perusal of existing empirical research on the topic. The second step utilized by the research team in development of the JSPE, was to examine face and content validity. Factor analysis was used as a statistical method to screen the best items of the instrument and ultimately yielded the final generic version of the JSPE, which contained 20 items (Hojat, 2007; Hojat et al., 2001).

As described by Hojat et al. (2005) and Hojat (2007), the generic version of the JSPE contained scales from the IRI (empathic concern, fantasy, and perspective taking), personality facets from the NEO PI-R (warmth, dutifulness, faith-in-people), items from self-report (compassion and sympathy), self-reported personal attributes (empathy, compassion, trust, sympathy, tolerance, personal growth, communication, self protection,

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humor, and clinical neutrality). Scales from the IRI, such as "perspective taking" ability, should be associated with better social functioning, due to the ability for an individual to anticipate the behavior and reactions of others (Davis, 1983). Persons that score high on the "fantasy" component will most likely exhibit a relationship with measures of emotionality. "No consistent pattern of relationships is expected between empathic concern scores and measures of social functioning" (Davis, 1983, p. 115).

The Student (S) and the Health Professional (HP) versions of the JSPE were revised to produce versions appropriate for students and health professionals. Further modifications were made in the wording of the S-Version to create the R-Version, which substituted the word "nurses" or "nursing care" instead of "physician" or "medical care" (Hojat, 2007). The JSPE Nursing Student Version R does not have any known published data at this time.

Student's Attitudes toward Empathy in Patient Care and Program Instruction

Literature suggests that empirical evidence of educational outcomes should infer curricular effectiveness. Robert Gagne' (1985) describes attitudes as possessing three aspects as a condition of learning. These include: (a) a cognitive aspect, or an idea, (b) an affective aspect, which includes feelings that accompany the idea, and (c) a behavioral aspect. The behavioral aspect pertains to the readiness or predisposition for action (Gagne, 1985, p. 222). The role of studies of attitude changes or behavioral changes is often associated with desired expected outcomes of program instruction. Beckman and Frankel (2003) caution (in the context of communication skills training) that "skills, attitudes, and knowledge can be discussed, lectured about and practiced in the classroom,

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but in the final analysis communication occurs at the bedside one conversation at a time"
(p. 85). Student's attitudes toward empathy in patient care were elucidated through
studies that reported declines, improvements and lack of change in attitudes. These
studies represented the gamut of program instruction from academic years encompassing
the junior- and senior-years of instruction.

Moderate-No Change in Empathy

Other medical researchers have structured studies around the same question of
effect of training on empathy and attitude changes. Assessment of empathy in different
years of internal medicine training was found to result in mean empathy scores that
neither changed significantly over one year, nor across multiple years in internal medical
students. This led to conclusions that empathy remained relatively stable during
residency training programs (Mangione et al., 2002). Rogers (1986) identified self-
reported and client-rated empathy levels of baccalaureate nursing students during the last
three years of their nursing education as a means to determine the effectiveness of
nursing instruction. As well as taking the LaMonica's ECRS empathy instrument, the
students were also asked to respond to items related to their perception of faculty clinical
priorities, reason for majoring in nursing and stress-producing life-change events, based
on previous works of Rahe (1972). Cross-referencing was also obtained through patient
ratings the students who had previously performed care. The results of this study
indicated a moderately well-developed concern for other as measured by the ECRS.
However, educational progression was not associated with significant increases between
the academic classification from sophomore to seniors on the ECRS, self-report, and
patient rating.

Becker and Sands (1988) investigated the relationship of self-reported empathy with clinical experience among junior-level baccalaureate students using a multidimensional measure of empathy. One goal of the study was determining outcomes of short-term interventions aimed at developing empathy levels. Thirty-five nursing students completed Davis' IRI at four times during their junior year. The study cited high levels of stability among first-year nursing students in their self-reported empathy scores, which has implications for short-term intervention aimed at increasing empathy levels.

Regarding curricular timing and attitudes, a nursing study of cohorts in the first year reported being highly committed to working therapeutically with people who have mental health problems and this high level of commitment, which was maintained throughout the course. One inference of the study results was that a positive predisposition to work with specific client groups provided educators with the advantage of a foundation from which to develop and refine effective responses (Lauder et al., 2002). Mangione et al. (2002) found that empathy was found to be a relatively stable trait that is not easily amenable to change in residency training programs, though it is unclear whether targeted activities designed to improve empathy actually increased scores.

An experiment conducted by Hodges (1991) in the development of empathy in student nurses showed that empathy was not increased nor decreased after experiencing an empathic training and psychological-mindedness experience. In this study, student nurses were assessed for their specific interview behaviors. The empathy training consisted of elements of didactic training, role-playing, role modeling, and some experiential training. Data obtained from the Patient Interview Assessment schedule

indicated that empathy training had no statistical differences, though there were several

limitations cited when evaluating the results of this study.

Declines in Empathy

Empirical studies of medical school students have yielded trends toward declines

in empathy, with students becoming more cynical as they progressed through their

programs, despite receiving training and instruction on empathy (Benbassat & Baumal,

2004; Deloney & Graham, 2003; Hojat et al., 2004; Rosenfield & Jones, 2004). Reported

causes for this decline of empathy were attributed to a lack of role models, educational

experiences that encouraged emotional detachment, such as valuing seeing over listening

to the patient (Rosenfield & Jones, 2004); affective distance, such as depersonalization of

the patient's disease; clinical neutrality (Benbassat & Baumal, 2004; Hojat et al., 2004);

and negative academic experiences, such as isolation, chronic lack of sleep, sadness,

prolonged exposure to human tragedies and depression (Spiro, 1992).

Rosenfield and Jones (2004) address central dilemmas in student's attitudes

during their medical school clerkships aimed at elucidating educational challenges in

teaching and learning how to provide empathic care. These broad categories (p. 928-933)

included a focus on pathology versus health, not knowing versus too much knowing,

vulnerability versus denial, and reaction versus inaction. The process through their

programs consists of the shift of perspective of the student from the initial stage of

disease being the norm in the hospital to concerns about lack of competence in

communicating with the patient for fear of "saying the wrong thing" or appearing to lack

the necessary knowledge. Also problematic are students that are overly aggressive to

confuse their understanding of the patient (pseudo-empathy) and understanding what the

patient is conveying (true empathy). During the vulnerability and denial phase, students often become overwhelmed with the intensity of patient suffering and are forced to face their own vulnerability to illness. The fourth phase is the student learning how to tolerate a patient's affect and anxiety, rather than avoiding it, and learning when and how to understand the patient rather than reacting.

In his research involving Yale University School of Medicine students, Spiro (1992) describes the educational curriculum's effect on medical students. Training foci served as a barrier to human understanding and hampered the growth of empathy. A combination of masking feelings, learning detachment and equanimity, exclusion of the humanities in the curriculum, and focus on the disease process resulted in leeching of empathy away from the typical student that previously possessed a great amount.

Research on timing of empathy and empathic communication content in curriculums has been studied as a possible reason for negative attitudinal change. Spiro (1992) studied first- and second-year medical students and found that they are much more receptive to anecdotal stories by faculty regarding roles of the patient and the physician. By the third and fourth year, the students have little time and enthusiasm for these anecdotes because their medical values have been set by the educational system.

Increased Empathy

Lonie et al. (2005) had similar findings regarding curricular timing of empathy training and changes in pharmacy students' self-reported empathic attitudes and behaviors. From this study many practical curricular revisions were rendered that allowed for more focused and extensive education on empathy as well as on other communication skills, timing considerations throughout the semester, and reorganization of topic delivery

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to facilitate reflection and integration of one concept before presenting another. This study measured empathy using the La Monica Empathy profile (LEP), which measured empathy along five modes: (a) non-verbal behavior, (b) perceived feelings and listening, (c) responding verbally, (d) respect for self and others, and (e) openness, honesty, and flexibility. Along these 5 dimensions, the results showed significant improvement in the dimensions of perceiving feelings and listening, and respect for self and others. The authors attributed these results to communication skills education the students experienced recently in the program. The active listening component had been stressed as an important empathic intervention in the communication skills course, thereby causing the authors to attribute the shift in attitudes (as reflected by the LEP) to student understanding of the concepts.

<center>Perceived Competency</center>

Competence has been cited as one outcome objective of nurse education programs and possesses a behavioral objective or skill component (Hale et al., 2006; Milligan, 1998; Stewart et al., 2000; Watson, 2002; While, 1994). Holistic conceptualizations of competence include knowledge, skills, attitudes, performances and levels of sufficiency (Benner 1984; Milligan, 1998; Short, 1984). Nursing student competence has been linked, but is not synonymous, with feelings of confidence, correlated with previous experience of performance and evaluation of the task, and linked with student satisfaction with clinical experiences (Butler et al., 2005; Dolan, 2003; Edwards et al., 2004; Hale et al., 2006; Stewart et al., 2000). Faculty must make decisions regarding optimal use of clinical experiences. These decisions include patient-student placement, post-clinical

discussions, length of time in clinical setting, and selection of clinical sites. Faculty are constrained by the practical reality of a limited amount of clinical and academic time in which to use these resources, and lack of substantial empirical evidence of what combination of teaching methods and experiential learning are most effective (Reynolds, 1992).

Role of Education

Despite seemingly common goals of nursing education and similar curriculum frameworks, there exists significant variability as to identification of reasons for student perception of their own competency levels, particularly when their educational experience is completed. Lauder et al. (2002) described the need for faculty to examine the prevailing perceptions of student nurses themselves regarding their ability to develop and practice skills necessary for effective therapeutic nurse-patient relationships. Most notably, this study examined the variables of role competency, role support and empathy to predict variability in levels of therapeutic commitment reported by student nurses. Results of this study found that third-year students had higher role competency than first-year students, although this was not significant. One pivotal finding this research highlighted was the impact of the clinical experience on student expectations about learning and the way in which educators contribute to student perceptions of what and from whom they need to learn. Departing from a self-perception of competence, was a study by researchers that determined that operational measures of empathy were linearly associated with ratings of clinical competence given by faculty members in the third-year of medical school students (Hojat et al., 2002). In this study, associations between empathy scores and ratings of clinical competence of medical school students correlated,

though student's grades in objective examinations did not significantly correlate with empathy scores (p.525-526).

Should greater emphasis be placed upon performance or competence for a proper education? While (1994) posits that the question is pivotal to nurse education because the more relevant focus of nurse education should be the performance of students in the real-life situation rather than competence. Watson (2002) asserts that the insistence of competence should not be at the expense of a proper education. Examples contained in higher education and exposure to other disciplines that relate content to understanding the deeper discipline are necessary to produce highly educated nurses.

Hall (2006) posits that the challenge of clinical placement development presents an opportunity to reconsider previously held views of clinical experiences design and to modify nursing education goal attainment. Due to the scarcity of clinical experiences, there are disparities and paradoxes between health promotion and prevention, while co-existing, with the emphasis on cure and palliation. The use of a social participation model, such as developing clinical placements as communities of learning, would be useful to students as an offer of support and collaborations with levels of expertise.

Positing that experience alone was not the key, Nicol et al. (1996) developed a framework which captured the student's trajectory to develop and integrate both cognitive and affective skills acquisition domains. Among these are: (a) Level A, which refers to initial exposure to the skill, (b) Level B, where the skills are practiced in a skills center prior to clinical placement, (c) Level C, where the student can perform safe and accurate performance under direct supervision in the care setting, (d) Level D, where the student's performance is "competent" with indirect supervision in the patient care setting,

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and (e) Level E, where there is skill mastery, and the student is confident and efficient to situational cues.

Preparedness for practice post-graduation was related to competency and was found to influence student's ability to transition from the role of student to qualified nurse (Edwards et al., 2004; Gerrish, 2000). Edwards et al. (2004) studied the relationship between nursing student's perceived competence and preparedness for practice and the location of clinical placements. Drawing from the research establishing the import of clinical experiences to competency, this study added the dimension of competency and student satisfaction with their clinical experience. Utilizing a quasi-experimental design, BSN students were given a pre- and post-test regarding the impact of clinical placement location (rural versus metropolitan) as to generating positive clinical experiences. Findings supported the value of diverse patient care settings, such as exhibited in the rural setting, to increased student perceptions of competence and preparation for practice.

Whether educational reforms have equipped nursing students with the ability to have the necessary knowledge, skills, and confidence to transition from student to qualified nurse remains undetermined. Gerrish (2000) described the process of nurses learning to perform their role as haphazard and resulting in the perceived lack of support and inadequate preparation. Some poignant factors that emerged from this study of cohorts indicated the increased need for clinical experiences in order for the students to develop confidence, and repetitive practice to achieve a sense of continuity of patient care.

Competence-Confidence Link

Understanding the role of confidence as differentiated from competence is important for nurse educators because self-evaluation of confidence contributes to a student's willingness to undertake an activity, and consequently perceived performance of a skill. Stewart et al. (2000) highlighted the difficulty and complexity between the selection of suitable anchored statements for use in a self-evaluation instrument between the terms "competence" and "confidence." In house officers (medical students), the study concluded that positive expressions of confidence did appear to relate to the house officer's expression of competence. Conversely, a negative expression of confidence could more likely be attributed to anxiety or perceived incompetence. The study highlighted the value of self-evaluation instruments to promote or facilitate reflection, but these instruments might not be used to accurately judge the individual's evaluation.

Bowles et al. (2001) studied nurse's communications skills training with a pre- and post-training instrument designed to examine the extent to which a short training course affected nurses' communication skills. Quantitative data instrument questions examined six areas on a Likert-type scale. Two of these areas centered on (a) competence in talking with people who are troubled, and (b) confidence in talking with people who are troubled. There were positive trends for competency and confidence, though not at a statistical level of significance.

Reasons cited as contributing to a lack of confidence and knowledge in clinical skills include lack of time in clinical placements, lack of exposure to both urban and rural settings, lack of community development, over-emphasis on theoretical premises, and a lack of outcome competencies and hands-on practice (Dolan, 2003; Edwards et al., 2004;

Farrand et al., 2006; Hall, 2006; Neary, 2001). Farrand et al. (2006) conducted a study of senior-level nursing students that examined student ratings of perceived confidence in their areas of nursing practice in core competencies for entry into practice. This study was performed following a competency-based approach to curriculum development. Competency-based curriculum students were compared with a previous curricular model (Project 2000). Results of this study indicated that increased confidence was achieved as a result of the increased curricular modifications that emphasized longer clinical placements, greater emphasis on skills, and a 3-month supervised clinical practice period. However, in keeping with the relationship between competence and confidence that was exhibited by Stewart et al. (2000), this study also supported the lack of congruency between student nurses' confidence and competence.

Sharp et al. (2003) described the perception of competency to perform procedures with family practice residents. This study suggested that residents were not being taught procedures in a manner that resulted in residents feeling competent to perform the procedures. The researchers found that 79% reported receiving some training in the procedures, but less than half (43%) felt competent to perform the procedures. This study brought to question whether the students had received adequate exposure to the patient care encounter, and highlighted the wide variance in training experiences and perceived competence after graduation.

Self-Perception of Competency

Lauder et al. (2002) described competency as it relates to one's role, described as a self-perception that working with one's task is a "legitimate part of one's role and that one has the skills and knowledge to discharge this responsibility well" (p. 484). Their

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findings cited several factors that hinder role competency of the nurse in therapeutic

relationships. These included failure to develop empathy, not viewing aspects of the role

as a legitimate part of one's responsibility, and time constraints that hinder relationship

with patients. In their study of three cohorts of nursing students, role competency was the

greatest predictor of therapeutic commitment. The implications to nurse educators from

this study highlighted the need for students to be given opportunities to continue to

develop skills which allow them to foster therapeutic relationships, especially with the

subject group in this study, which included patients with mental health problems.

Competency in the clinical setting was found to be influenced by student

perception of being provided with sufficient experiences, time, and safe experiences

during clinical rotations to gain confidence (Dolan, 2003; Edwards et al., 2004; Gerrish,

2000; Sharp et al., 2003; Woolley & Jarvis, 2007). Dolan (2003) conducted eight focus

groups centered on four themes: Components of competency, assessment process issues,

evidence to support competency, and the preceptorship experience. The results of this

study indicated the students did not perceive they had a holistic experience of care, but

rather were focused on getting competencies "signed off." Students were also concerned

with the lack of experience with specific common skills and inconsistencies between

preceptors' interpretation of competencies.

A comprehensive study (Mozingo et al., 1995) examined factors affecting

perceived competency levels in graduating Baccalaureate nursing seniors. Drawing from

literature citing several factors that potentially affect competency levels of students, such

as self-esteem, stress, anxiety, and academic experiences, this study examined three

classes from a large baccalaureate nursing program. This study found that perceived

competency was related to the performance of clinical/technical skills, level of anxiety, and social support. A pervasive theme throughout the students was the desire for more faculty feedback in increasing confidence of students and technical skill practice opportunities.

Advanced Empathic Communication

Patient care situations that require advanced competency in empathic communication (such as end-of-life issues, cancer care, difficult patients, and chronic care patients) must be disease- or situation-specific to produce changes (Back et al., 2003; Butow, 2005; Hale et al., 2006; Mukohara et al., 2004; Thorne et al., 2005). Additionally, students need to be given the opportunity to continue to develop skills which allow them to effectively interface with patients experiencing a gamut of challenges such as in the mental health population (Lauder et al., 2002), seriously-ill patients (Kruijver et al., 2001; Lucio et al., 2000) rural or remote patients (Edwards et al., 2004), and the palliative care of children and adolescents (Hale et al., 2006). An evaluation of educational preparation for cancer and palliative care nursing for children and adolescents revealed several deficiencies that were contrary to the national standard of competence; among these were the lack of emphasis on the assessment of clinical skills, the problem of student selected content of assessment, the different starting points of students, and the lack of reliability and validity of the assessment process (Hale et al., 2006).

Summary

Nursing faculty are continually challenged to prepare students to fulfill the role and critical competencies for professional nursing practice, and establish ways by which the achievement of these goals can be evaluated and refined to promote the integrity of the institution and advance the nursing profession (AACN, 1998). Broadly defined within the context of professional nursing education, the role of the nurse includes (a) providing care, (b) designing, managing and coordinating care, and (c) functioning as members of a profession (AACN, 1998). The role component encompassed in the purpose of this study involved the ability of the nurse to form partnerships with patients, communicate with the patient, and advocate and teach patients (AACN, 1998). This aspect of communication is contained within the core competency of communication, and includes the use of therapeutic communication as a means to elicit and clarify patient preferences and values.

The driving assumption of this study was based upon the premise that nursing program quality of the didactic and clinical teaching-learning practices and learning environment (CCNE accreditation Standard III-E) should support the achievement of positive student learning outcomes. Research studies, as discussed in this chapter, have posited that attitudes and perceived competence contribute to supportive evidence of attainment of positive learning outcomes.

In order to examine the possibility of a relationship between student perception of program effectiveness in teaching them to empathically communicate and (a) attitudes toward patient care and (b) competence to empathically communicate as a result of nursing program instruction, there needs to be appropriate measures of attitudes and competence. Literature from nursing and other healthcare professions provided valuable

information regarding attitudes and the use of instruments that measure student attitudes toward empathy in patient care. Among these were the IRI, Layton's Empathy Scale, ECRS, the NEO-PI scale and versions of the JSPE instrument.

In this chapter, literature was related to the purpose of the study, integrating the broad themes of the independent variables. These included fulfilling the critical competencies for professional nursing practice in the interface between empathy and empathic communication as part of therapeutic communication, and the didactic and clinical teaching learning practices used by programs to support the achievement of student learning outcomes. Broad themes of empathy conceptualizations, definitions, and the role of empathy in patient care, established the import of the concept as instrumental in understanding the patient's perspective and providing nursing care. Empathy as a concept was discussed as related to the conceptualizations of (a) a human trait, (b) a professional state, (c) a communication process, (d) as caring, and (e) as a special relationship. The didactic and clinical teaching practices to teach empathic communication expanded the gamut of use of the humanities and artwork, combinations of approaches, use of technology, and reflective exercises with students.

The final sections of this chapter related the independent variables to the dependent variables or outcome measures of: (a) attitudes toward empathy in patient care, and (b) perceived competence to empathically communicate with patients and families as evidence toward the achievement of these student learning outcomes. Literature regarding attitudes toward empathy in patient care was structured upon three tenants, such as declines, improvements, and moderate to no-change upon measurement. Student perception of competence encompassed a competence-confidence link, self-perceptions

of competence, and patient care situations requiring advanced competency, such as

cancer care and communicating with terminal illness.

III. METHODS

Overview

The use of survey design was used to answer the research questions discussed in this study. This research study presents factor analysis of the JSPE Nursing Student Version R and multiple regression analysis of data collected from September, 2006–November, 2006. The study population included nursing student seniors from 14 participating nursing programs who were scheduled to graduate in December 2006 or May 2007. The survey, described in detail in this chapter, included the administration of two questionnaires (see Appendix A). The Jefferson Scale of Physician Empathy (JSPE) Nursing Student Version R is a modification of the JSPE S-Version and is a self-administered, 20-item test that was developed by researchers at the Center for Research in Medical Education and Health Care at Jefferson Medical College. The JSPE S-Version was designed to reflect students' orientation or attitudes toward empathy in patient care. The JSPE Nursing Student Version R, though containing items closely worded to the JSPE S-Version, has no previous published data regarding its unique psychometric properties.

The Nursing Student Empathic Communication Questionnaire is a researcher-developed questionnaire containing questions to examine senior nursing student's perspectives regarding the teaching of therapeutic communication (including empathy) in

their nursing programs. This questionnaire contained sections regarding clinical exposure of students to patient-care situations, meeting of needs of students with timing and curricular emphasis, perceived program effectiveness and influence to use empathic communication from various teaching sources.

The survey instruments were administered via on-site classroom collection from the researcher. In general, the responding samples were determined to be representative of their respective populations through power analysis. Data was entered and analyzed by use of SPSS Graduate Student Edition Version 13.

Population

The population in the study consisted of baccalaureate nursing school seniors attending Commission on Collegiate Nursing Education (CCNE) accredited programs. CCNE accredited programs were selected because the programs had demonstrated successful completion of similar formative and summative evaluation through CCNE, the autonomous arm of the American Association of Colleges of Nursing. Representation comprised of 14 programs from 13 institutions in the Southeast region included programs from Tennessee (2), Alabama (7), Florida (1), and Georgia (3). Two programs from one institution consisted of students from the accelerated nursing program and the traditional program. Students were identified for the study by their classification as seniors-level students with anticipated graduation in December 2006 or May 2007. A single-stage sampling procedure was used where the sample group was sampled directly (Creswell, 2003).

The selection process utilized a geographically restricted sample chosen due to availability of the sample group for data collection. The sample was stratified to ensure representation of characteristics present in the entire population to improve generalizability. Among these considerations were program size, geographical regions, demographics of regions (rural versus urban), institution classification (private and public), diversity of applicants (age and race) and religious affiliation of institution. Within each program stratum, the sample did not contain individuals with the same characteristics in the same proportion as the characteristic appears in the entire population. However, the population as a whole was representative of national statistics with a few exceptions, as discussed in Chapter 4.

Instrumentation

There were two survey instruments used to collect data in the research study. These consisted of (a) Jefferson Scale of Physician Empathy (JSPE) Nursing Student Version R and (b) Nursing Student Empathic Communication Questionnaire (NSECQ). These questionnaires were combined for ease of student distribution in the form of a single stapled packet on white paper with grayscale headings using Arial 11 font for optimal readability (Dillman, 2000). The JSPE comprised questions 1-20 on the first page of the packet, and the NSECQ questionnaire comprised pages 2-4. The JSPE Nursing Student Version R was used following express permission from the author.

The students were given instructions prior to delivery of the questionnaire packet detailing the placement of one single answer per question as well as use of pencil, marker or ink pen to indicate answer selections. Students were instructed to not place any

identifying information on the packet, such as school name or personal name. Students were also given the Information Letter (see Appendix B) prior to questionnaire administration describing IRB considerations and inviting the students to participate in the study. Instructions as to definitions of Likert-scale items and an empathy definition were indicated above the questions on both scales. Questionnaire packets were collected upon completion by student placement of completed packets face-down into a box located in the rear of the classroom provided by the researcher. To prevent the potential appearance of coercion to participate in the study by both the researcher and the faculty member, the students completed the questionnaire with the researcher and faculty member outside the classroom door.

JSPE Nursing Student Version-R

The JSPE Nursing Student Version-R is derived from a generic version of the Jefferson Scale of Physician Empathy, acronym JSPE. This instrument was chosen by the researcher due to its relevancy to health profession students in the clinical context of patient care situations. There are other commonly used measures of empathy that have been used for the general public, such as the Interpersonal Reactivity Index (IRI), the Emotional Empathy Scale, and the Hogan Empathy Scale. Hojat et al. (2001) describes the generic version of the test as self-administered, containing 20 items, developed by researchers at the Center for Research in Medical Education and Health Care at Jefferson Medical College. The purpose of the original test is to measure orientation or attitudes of medical students toward empathic relationships in health care situations. Following the preliminary data on the generic version of the JSPE, the research team slightly modified the scale by replacing the wording referring to "physician" with the appropriate title of

the students from other health professions (nurse, therapist). Respondents indicate the extent of their agreement or disagreement for each of the 20 items using a 7-point Likert scale ranging from Strongly Agree = 7 to Strongly Disagree = 1. The possible range of resulting scores was 20-140 (Hojat, 2001).

Creswell (2003) describes the importance of reporting past use of the instrument in demonstrating reliability. Hojat (2007) reports descriptive statistics of the student version as the mean-item scores ranging from a low of 4.57 to a high of 6.63 on the 7-point scale, and the standard deviations ranging from 0.78 to 1.45. Psychometric review reports that all item-total score correlates were positive and statistically significant ($p < 0.01$), ranging from a low of 0.30 to a high of 0.66. The median item-total score correlation was 0.50. The JSPE Nursing Student Version- R has no previously published statistical analysis, which highlights the importance of establishing validity and reliability of this version.

Researcher selection of the JSPE Nursing Student Version-R was largely based on the enhanced validity due to pre-established psychometrics. Hojat (2007) speaks to the psychometric analysis of the JSPE and suggests that the instrument can serve as an operational measure of students' orientation or attitudes toward empathy in patient care (S-Version). The instrument was subjected to factor analysis to retain the best items. Gorsuch (1974) describes factor analysis as a statistical method used to examine the empirical relationships among a set of variables, as well as exploring the underlying constructs associated with a set of items into important and meaningful factors.

Nursing Student Empathic Communication Questionnaire

A researcher-developed, two-sectioned questionnaire was used to gather data for this study (see Appendix C). This questionnaire had not been previously administered to a sample group. The Likert-type questions were all phrased with a positive frame to ensure consistency of response (Dillman, 2000). Section A of the questionnaire consisted of 10 primary items with subscales that, through extensive and comprehensive literature review, were considered to be factors associated with BSN student's nursing program components to establish perceptions regarding the teaching of therapeutic communication (including empathy) clinical and academic experiences. Conceptual frameworks, empirical research and theoretical views from a multidisciplinary perspective were used to understand the concept of empathy and empathic communication and to extrapolate the necessary elements regarding teaching techniques in nursing programs. Literature was selected through medical, psychology, and nursing databases over the past 10 years. Keywords included empathy, empathic communication, competency, patient perspectives, and clinical experiences.

The questionnaire was piloted by experts and non-experts from various geographical regions prior to student administration to students to ensure readability, establish content validity, provide a projected completion timeframe, and elicit feedback and recommendations for improvement. Participants in the pilot feedback included a Master's prepared nurse educator that has published research on the concept of empathy, a nurse manager working in a hospital clinical setting, a nurse training and development specialist and a pre-nursing student. Additionally, a published author and researcher in the field of psychometric development of empathy tools who specialized in working with

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healthcare professionals and students were utilized in the pilot study of the instrument

packet. Feedback was instrumental in slight modifications in questionnaire wording to

enhance clarity, organization of constructs, and the addition of questions pertinent in the

clinical arena.

The questionnaire asked participants to rate the degree that they disagreed or

agreed with statements regarding their nursing programs. The questionnaire was designed

with similar component parts grouped together (Dillman, 2000). Table 1 displays the

variable, Likert-type scale options, and questions contained within the variable

(construct).

Table 1

Nursing Student Empathic Communication Questionnaire Construct Overview

VARIABLE/CONSTRUCT	Question Numbers	Questions	Likert Scale Options
Program Effectiveness (Questions 5 and 6 were not included in the sub component nor used in regression analysis, due to demographical nature of the questions)	1-4	1. Overall, my nursing program has been effective in preparing me to be competent in empathically communicating with patients and families. 2. My ability to empathically communicate with patients and families has improved since the start of my program. 3. I receive consistent feedback among all my faculty members regarding core competency behaviors to communicate therapeutically with patients and families. 4. Empathic communication skills are valued by my faculty. 5. Empathy assessment should be a part of the selection criteria for nursing school.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

(table continues)

Table 1 (continued)

VARIABLE/CONSTRUCT	Question Numbers	Questions	Likert Scale Options
		6. I would attend more classes on the topic of learning how to empathically communicate with patients and family if they were offered in my nursing program.	
Academic Sources	7a-7h	Please rate the degree to which you learned or were influenced to use empathic communication from each of the following sources: a. Classroom teachers b. Clinical teachers c. Practicing nurses d. Lecture content e. Journal entry and personal reflection f. Role-playing g. Simulation with computers h. Post clinical discussions with peers and faculty	(1) Not at all to (5) a great extent
Academic Exposure (frequency of experience to patient care situations)	8a-8f	a. The number of times I (or my clinical group peers) discussed empathic communication in a post-conference with my clinical instructors. b. I have provided nursing care to patients that have experienced uncontrolled pain in my clinical rotation. c. I have provided nursing care to patients that have been given a recent chronic disease diagnosis (such as diabetes, congestive heart failure). d. I have provided nursing care to a patient's family member(s) immediately following post-news of the patient's terminal condition. e. Patients/families have made positive comments specifically about my communication ability in "understanding their perspective".	N= never S= seldom O= Often AEC= Almost every clinical EC= Every clinical

Table 1 (continued)

VARIABLE/CONSTRUCT	Question Numbers	Questions	Likert Scale Options
		7. I have received negative performance feedback or remediation on my clinical performance for "less than acceptable" therapeutic communication with a patient or family member.	
Perceived Competency	9a-9h	Please indicate the extent to which you perceive you are competent in your present ability as a result of your nursing program instruction:	(1) Not competent to (5) highly competent
		a. Empathically communicating with patient and family members regarding end-of-life decisions.	
		b. Empathically communicating with the patient with uncontrolled pain.	
		c. Empathically communicating with patients that have been given a recent chronic disease diagnosis (such as diabetes, congestive heart failure).	
		d. Empathically communicating with a patient's family member(s) immediately following post-news of the patient's terminal condition.	
		e. Empathically communicating with patients that are mentally ill/psychiatric care situations.	
		f. Empathically communicating with the elderly.	
		g. Empathically communicating with patients/family from a different culture.	
		h. Empathically communicating with patients who are identified by other members of the health care team as "difficult" (such as angry, demanding, rude, hostile, etc.)	

(table continues)

Table 1 (continued)

VARIABLE/CONSTRUCT	Question Numbers	Questions	Likert Scale Options

Curricular Emphasis	10a-10e	Please indicate the time and emphasis of curriculum on empathic communication in your nursing program:
		  a. pre-nursing
		  b. Junior year academics
		  c. Senior year academics
		  d. Clinical experiences in Junior year
		  e. Clinical experiences in Senior year
			FFS= Fell far short of my needs
			FS= Fell short of my needs
			NA= Was necessary amount
			SE= Somewhat exceeded that which was needed
			FE= Far exceeded that which was needed

Program Effectiveness

Questions 1-4 referred to overall perception of program effectiveness in teaching empathic communication. Responses were based on a five-point Likert-type scale with the following choices ranging from Strongly Disagree (SD), to Strongly Agree (SA). Examples of questions in this section included sought to elicit student perception of the program in utilizing resources, such as faculty and clinical instruction to enhance empathic ability in communicating with patients and families. Questions 1-2 sought to determine an overall perception of program effectiveness and improvement of student ability as a result of instruction in the program. Questions 3-4 refer to the resource of faculty in teaching empathic communication. Questions 5-6 acknowledge the student's personal role in determining perception of program effectiveness, such as import of empathy as part of selection criteria for nursing school and personal desire and professional development to broaden own learning skills in improving empathic

communication ability of offered in the program. However, these two questions were not used in the regression analysis due to the demographical nature of the questions as representing a different construct than questions 1-4.

Academic Sources

Questions 7a-7h, Academic Sources, were used to rate the degree to which the student learned or were influenced to use empathic communication from sources commonly cited in the literature that are used with program instruction. These are classroom and clinical teachers, practicing nurses, lecture content, role-playing, post clinical discussions with peers and faculty, and journal entry personal reflections. A newer method, that includes use of computer simulations was included, though more pervasive in medical literature. The five-point Likert scale ranged with responses from 1= "not at all" to 5 = "to a great extent".

Academic Exposure

Questions 8a-8f, Academic Exposure, asked participants to indicate the frequency they experienced patient care situations in their clinical experiences. Response choices included Never, Seldom, Often, Almost Every Clinical, and Every Clinical. Question 8e and 8f were included to reflect the performance component of the student in empathically communicating with patients and families, such as positive comments from patients and family members and remediation for less than acceptable empathic communication from clinical performance.

Competence

Questions 9a-9h was based on establishing the extent of student perception of competence in their present ability as a result of their nursing program instruction. Likert-

scale selections ranged from 1-5, with 1= "not competent" to 5 = "highly competent".

Examples of questions included frequent patient and family care scenarios that are

common in the professional literature as requiring high empathic communication skills

and that potentially could require perspectives and communication skills beyond what the

student had experienced through everyday experiences. These areas included end-of-life

decisions, uncontrolled pain, recent chronic disease diagnosis, immediately following

post-news of the patient's terminal condition, mentally ill/psychiatric situations, elderly,

patients form a different culture, and patients identified as "difficult".

Curricular Emphasis

Questions 10a-10e consisted of questions regarding the construct of curricular

emphasis on empathic communication in their nursing program. Five-point Likert items

ranged from "fell far short of my needs" to "far exceed that which was needed". The

major time periods ranged from the initial entry into nursing school program with the pre-

nursing curriculum through the senior year. Clinical experiences were separated from

academic experiences in this question grouping to reflect theory-practice components and

program emphasis.

In examining face validity of items included in the Nursing Student Empathic

Communication Questionnaire, there were items included that potentially could appear as

irrelevant. However, these items were included based on theoretical support. For

example, questions regarding the "frequency that patient care situations were

experienced" was based on a linkage of "learned or were influenced to use empathic

communication" by sources, such as by the influence of faculty members and/or clinical

instructors. Since patient care assignments are directed by clinical instructors and faculty, these items were included in multiple sections for cross-validation.

Potentially problematic due to theoretical diversification and lack of consensus, is the section of the questionnaire related to perceived competency. The conundrum of trained versus inherent empathy made construction of these items particularly difficult. Students were asked to indicate the "extent to which you perceive you are competent in your present ability as a result of your nursing program instruction". Students that attributed their competency in empathically communicating with various clinical scenarios to other sources than their nursing program instruction, such as life experiences or their spirituality would experience difficulty in answering this section. Some students expressed their dissonance with this section in the form of anecdotal comments reinforcing this belief. However, this section was included because it was theoretically linked with AACN Standards, which state that "nursing educators must design programs that allow students to acquire the described knowledge, skills, competencies and values, and must evaluate graduates to ensure the achievement of desired outcomes at graduation" (p. 2). Competency in clinical ability is one indicator of effectiveness of nursing instruction from the student perspective.

Questions related to time and curricular emphasis in the nursing program was framed from the perspective of capturing the student's needs (ranging from "fell far short" to "far exceeded that which was necessary") on the theoretical premise of program effectiveness in providing exposure to patients and families in which to provide empathic communication and receive necessary remediation or reinforcement through clinical discussions and in the academic arena through skill enhancement.

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Section B

Section B of the questionnaire contained demographic questions consisting of gender, age, ethnicity and clinical area of interest post-graduation. These demographic questions were supported in the literature as being predictors of empathy and empathic communication (Hojat, 2007). Clinical areas of specialization representative of coursework encountered in nursing programs consisted of both broad categories of employment such as maternal-child health, adult health, community health and specialized categories such as emergency-trauma, critical-care, renal, and labor-delivery.

Data Collection Procedures

A survey design was selected for this study to provide a quantitative description of nursing student perceptions of program effectiveness in teaching empathic communication. The purpose of this design was to provide a means to generalize from the sample to a population so that inferences could be made regarding characteristics, attitudes, and behaviors of this population (Creswell, 2003). Survey design was the preferred type of data collection procedure for the study because it afforded the researcher many advantages. Among these advantages were economy of design, student availability, convenience to researcher and students, relatively low printing costs and the rapid turnaround in data collection. Survey collection was also chosen because of the lack of burden on the time demands of the respondents, privacy concerns of program effectiveness input, and logistical obstacles to limited student availability of the senior level students that are potential challenges with other data collection methods, such as interviews, structured observations or record reviews. There were many advantages that

survey design afforded in identification of attributes of a large population from a relatively small group of individuals. This consideration was particularly important with the use of factor analysis in seeking construct validity of the JSPE Version R Scale.

The survey was administered to senior nursing students with one-time data collection occurring during the months encompassing Fall Semester 2006. This time period lasted from late September to late November 2006, with survey administration conducted by the researcher at specified times in accordance with student attendance in their classrooms.

Data was collected by use of self-administered questionnaires. A hard-copy version of the survey instrument versus electronic format was chosen for improved response rate and timely response by the students. Additionally, use of the self-administered questionnaire in hard-copy format was utilized rather than an Internet or online survey due to the large number of institutions in the sample group. The advantages of this collection method such as ensured data availability and convenience offset the potential weaknesses incurred by cost of travel by the researcher and questionnaire printing costs.

Procedures for recruitment of the sample group were initiated by obtaining potential CCNE accredited schools from the AACN web-site. Telephone contact was made by the researcher to the nursing school Dean or Assistant Dean to request permission to recruit students from the programs. Electronic information letters were sent following verbal permission describing the study's purpose, use of results, contact information, flyer, questionnaire, IRB status, and requesting for permission to begin arranging data collection. Tentative dates and times for data collection were requested

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and provided by the Dean or by a designated nursing program contact person with consideration given to optimize and prevent interruption of existing classroom instruction. Only mandatory courses containing an entire senior student class were scheduled for data collection, which usually consisted of leadership or senior seminar courses. Consideration by the researcher and coordination with the contact faculty was given to select optimal data collection times, dates, and classroom agendas inherent with each institution. Individual IRB approval was sought for each participating institution according to protocols (see Appendix D).

Each institution was given access to a flyer template (see Appendix E) for distribution in student mailboxes or posting in classrooms or central student locations describing the study, purpose, data collection, date and time, and voluntary status. No institutions chose to distribute the flyer, but rather verbally announced through the faculty member the voluntary research participation opportunity to students prior to data collection. The sample was selected by offering students the opportunity to participate after reading a script that explained the voluntary nature of the study, how results would be utilized, ensuring anonymity, and questionnaire completion instructions. There was no compensation by the researcher or classroom faculty for participation in the study. There were no provisions for questionnaire completion for students that were not in classroom attendance during the data collection period.

Sample-Size Considerations

Pedhauzur (1997) and Meyers et al. (2006) recommended the use of a target ratio of 10-15 participants for every variable. The use of a sample size of 600 students in this

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study exceeded this criterion which was analyzing the two instruments, combined 53-item questionnaire inventories.

Data was coded by nursing program affiliation and respondent and responses were entered into SPSS Graduate Student Version 13 by the researcher. Variables were numbered in the order they appeared on the questionnaires. The use of the five-point Likert-scale for the Nursing Student Empathic Communication Questionnaire provided a neutral category with the number 3. The JSPE Nursing Student Version R utilized a 7-point Likert scale, ranging from lower numbers representing strongly disagrees, to the higher numbers representing strongly agree responses. Section B was recoded to represent the categories of post-graduation clinical interest, gender, age, and ethnicity.

Data Analysis

The JSPE Nursing Student Version R was initially analyzed in Research Question 1 with descriptive analysis and a one-sample t-test. Research Question 2 utilized factor analysis and Research Question 3 utilized the JSPE Nursing Student Version R as the dependent variable and the Nursing Student Empathic Communication Questionnaire sub-constructs consisting of academic exposure, curricular emphasis, perceived program effectiveness and academic sources as independent variables. Question 4a and 4b consisted of multiple regressions with the dependent variable of perceived competence and the Nursing Student Empathic Communication Questionnaire sub-constructs consisting of academic exposure, curricular emphasis, perceived program effectiveness and academic sources as independent variables. JSPE Nursing Student Version R total scores were added in Research Question 4b as an independent variable along with the

sub-constructs with the dependent variable of perceived competence. Meyers et al. (2006) emphasizes the importance of further analysis, such as multiple regressions, after factor analysis to predict the value of a quantitative variable in multiple regressions using the factors as the independent variables.

In the factor analysis, the data was initially analyzed through univariate extraction rotation, with Eigen-values plotted. Meyers et al (2006) describe factor analysis as a process that allows the identification of a few components, factors, or dimensions that underlie a larger set of variables. Varimax rotation followed, with correlations analyzed. Reliability values, statistical correlations of the total scores, and descriptive data (including means and standard deviations) were analyzed for questions 1-20. Frequency analysis and percentile (25th, 50th, and 75th) were analyzed to be used in comparison data with the JSPE Version S. Descriptive statistics served to describe and summarize observations (Ary et al., 2006).

The scoring algorithm for the JSPE Nursing Student Version R was performed by the researcher as per protocol established by Hojat (2007), which consisted of (a) ensuring that 80% of the 20 items were answered in order to be included in the data analysis, (b) ensuring that respondents with 4 or fewer unanswered items, missing values were replaced with the mean score calculated from items completed by the respondent, and (c) reverse scoring of question items 1, 3, 6, 7, 8, 11, 12, 14, 18, and 19. Total JSPE Nursing Student Version R scores were calculated and this independent variable was renamed "JSPE Version R total" for analysis by multiple regression technique. Higher total JSPE Nursing Student Version R scores indicate greater empathic behavioral orientation of the student.

Nursing Student Empathic Communication Questionnaire

The Nursing Student Empathic Communication Questionnaire variables were selected for inclusion in the analysis for the research study. There were five constructs used in the construction of the questionnaire. Chapter 4 presents the concepts, question numbers, mean, standard deviations, and Cronbach's alpha of these components that constituted the Nursing Student Empathic Communication Questionnaire.

Correlation, reliability and descriptive analyses were performed on the variables of JSPE Version R Total, Program Effectiveness, Academic Sources, Academic Exposure, Perceived Competence, and Curricular Emphasis. Regression analysis with criteria of significance at .05 was performed with three full models, with (a)the dependent variable perceived competency and Program Effectiveness, Academic Sources, Academic Exposure, JSPE Nursing Student Version R total scores, and Curricular Emphasis as independent variables, (b) the dependent variable perceived competency and Program Effectiveness, Academic Sources, Academic Exposure, and Curricular Emphasis as independent variables, and (c) the dependent variable of JSPE total scores and academic exposure, curricular emphasis, program effectiveness, and academic sources as independent variables. The goal of this selection of these variables was to determine how and to what extent, variability of the dependent variable depends on manipulations of the independent variables (Pedhazur, 1997). Additionally, backward regression was performed with the full model between Competence as the dependent variable and student attitudes toward empathy in patient care (JSPE Nursing version R total scores) and individual questions within the constructs of Academic Exposure, Program Effectiveness and Curricular Emphasis and Academic Sources as independent variables.

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Backward regression was used to explain each of the four independent variables offering the most parsimonious solution.

Chapter 4 provides detailed analysis of both descriptive statistics and results of the factor analysis of the JSPE Nursing Student Version R. The full model and restricted models of the multiple regression analysis are analyzed and depicted in tabular form.

Summary

The use of the JSPE Nursing Student Version R combined with the Nursing Student Empathic Communication Questionnaire addressed the research questions by combining constructs represented in the literature into scales designed to measure empathy and student perception of program effectiveness in teaching empathic communication. The sample group of senior nursing students from 14 nursing programs was selected from BSN programs that are currently CCNE accredited. Methodology that consisted of researcher data collection through survey design, via site visits to each program, was selected to optimize sample size of the student population.

IV. RESULTS

Overview

Chapter 4 described the first statistical analysis employed to the data as descriptive statistical procedures. By analyzing the results from this sample group of nursing seniors, the goal of this research study is to make general statements about the population as a whole (Gravetter & Wallnau, 2004). The results are presented as a descriptive overview of the responses from the questionnaire, providing percentages, means and standard deviations of each response to each variable.

Exploratory factor analysis provided psychometric properties to the JSPE Nursing Student Version R tool. Comparisons between the score distributions, percentiles, and descriptive statistics of the S Version of the JSPE (Hojat, 2007, p. 105) and the R Version are presented, which are crucial to providing empirical confirmation to assist with supporting validity of the JSPE Nursing Version R in the nursing student population. Correlational analysis of JSPE Nursing Student Version R total scores are presented as compared to the five constructs represented in the Nursing Student Empathic Communication Questionnaire. Finally, regression analysis was used to examine predictors of perceived competency in present ability to empathically communicate as a result of nursing program instruction and student attitudes toward empathy in patient care (JSPE Nursing Student Version R total scores) .

Sample Demographics

As described in detail in Chapter 3, nursing school seniors from 14 nursing programs completed and returned 600 surveys representing an overall mean response rate of 83%. Reponses from the individual programs ranged from 55% to 94% response rates, with a median of 86%. The sample population for the research study analysis included demographic information regarding age, ethnicity, gender and clinical areas of interest post-graduation.

The greatest percentage of students from the sample group was from age 20-22 years (46.6%), followed by 23-25 year olds. The greatest percentage of the sample was females (88%). Caucasian ethnicity constituted the largest percentage (83%). The largest percentage of post graduation clinical interest was Critical Care (27%).

The senior nursing student participant pool consisted of 276 (46.6%) age 20-22 year olds, 154 (26%) 23-25 year olds, 45 (7.6%) 26-28 year olds, 59 (10%) 29-36 year olds, and 58 (9.8%) reporting their age as greater than 36. The participant pool consisted of a population of 523 females (88%) and 72 males (12%). There were 5 participants that declined to indicate this information.

The sample group reported their ethnicity as: African American, 53 (9%), Asian, 17 (3%), Caucasian, 494 (83%), Hispanic, 14 (2%), Native American, 4 (.7%), and Other, 10 (1.7%). There were 8 participants that constituted missing data in indicating their ethnicity. The final demographic question, asking participants to indicate their primary area of clinical interest post-graduation was: Adult Health, 51 (9%), Labor and Delivery, 61 (10%), Cardiac Step-down unit, 21 (3.5%), Maternal-Child, 55 (9%), Community Health, 9 (1.5%), Pediatrics, 80 (13%), Critical Care (ICU/CCU), 164 (27%), Psychiatry,

10 (1.7%), Emergency/Trauma, 92 (15.5%), Renal/Hemo-dialysis, 6 (1%), Geriatrics, 16 (2.7%), and Other, 30 (5%).

Generalizing to other populations is important to establishing external validity (Cronbach, 1990). Researchers desire to furnish results of a study that furnish information about a larger realm of subjects, conditions, and operations than were actually investigated (Ary et al., 2006). In this study, demographic findings (see Table 2) were compared to statistics provided by the American Association of Colleges of Nursing (2006), which stated that 90% of participating schools reported female gender, and males accounted for 10%. In terms of ethnicity, Asian students accounted for 5.8%, African American, 12%, Hispanic. 5.2%, Native American, .8% and Caucasian (White), 76% (Fang, Wilsey-Wisniewski, & Bednash, 2006).

In terms of the sample group represented in this study, gender was slightly over represented by the male sample in this study (chi-square = 3.92) of the population reflected in AACN figures. In terms of ethnicity, there were a larger percentage of Caucasian students (particularly female students) participating in this study than reported in the AACN national figures, as well as smaller diversification of minority groups, particularly among Asian and Hispanic students surveyed in this study (chi-square = 27.4).

Table 2

Comparison of Sample Group with National Population

	AACN	Sample
Gender		
Female	90.3%	88%
Male	9.7%	12%
Ethnicity		
African American	12.1%	9%
Asian	5.8%	3%
Caucasian	76.1%	83%
Hispanic	5.2%	2%
Native American	0.8%	0.7%
Other	—	1.7%

AACN demographic figures regarding Gender (n = 161,787 students) and Ethnicity (n = 148,944 students) enrolled Fall 2005 (Fang, Wilsey-Wisniewski, & Bednash, 2006).

Research Question 1

The first research question was, "Is there a statistical difference between the JSPE Version S and the JSPE Nursing Student Version R was answered by utilizing

comparative analysis in psychometric properties of the JSPE S-Version and the JSPE

Nursing Student Version R?" Researchers at Jefferson Medical College collected data for

685 first year students. Data was combined from student groups due to the similarities of

all three classes (matriculates of 2002, 2003, and 2004). According to Hojat, the mean

item scores ranged from a low of 4.57 to a high of 6.63 on the 7-point scale and standard

deviations ranged from 0.78 to 1.45. The item-total score correlations were all positive

and statistically significant ($p < 0.01$), ranging from a low of 0.30 to a high of 0.66. The

median item-total score correlation was 0.50. Descriptive statistics and reliability

coefficients for the S-Version of the JSPE are reported in Table 3.

The results of data collected in this study of 600 senior nursing students from 14

CCNE accredited nursing programs in the Southeast were analyzed. Descriptive statistics

and reliability coefficients for the JSPE Nursing Student Version R are reported in Table

3. The mean item scores ranged from a low of 3.89 to a high of 6.56 on the 7-point scale,

and standard deviations ranged from 0.97 to 1.65. The item-total score correlations were

all positive and statistically significant ($p < 0.01$), ranging from a low of 0.17 to a high of

0.53. The median item-total score correlation was 0.37.

Comparisons of the JSPE Versions S and R yielded similar means and standard

deviations with 115 and 114.57 respectively, and standard deviations of 10 and 10.94

respectively. The results of a one-sample t-test failed to render statistical significance ($t =$

-1.22, p=.224). The greatest variability was in the range, which was 75-140 for the JSPE

Version S and 56-140 for the JSPE Nursing Student Version R.

Table 3

Descriptive Statistics and Percentiles between the JSPE S-Version (n = 685 medical

students) and JSPE Nursing Student Version R (n = 600 senior nursing students)

JSPE S-VERSION	JSPE R-VERSION
Mean 115	Mean 114.57
Standard Deviation 10	Standard Deviation 10.94
25th Percentile 108	25th Percentile 108
50th Percentile 115	50th Percentile 116
75th Percentile 122	75th Percentile 122
Possible Range 20-140	Possible Range 20-140
Actual Range 75-140	Actual Range 56-140
Alpha Reliability estimate 0.80	Alpha Reliability estimate 0.77

Research Question 2

Research question 2 was, "What unique themes, dimensions, and factors emerge

from the JSPE Nursing Student Version R scores?" An exploratory factor analysis using

a principal component extraction method and a varimax rotation of 20 self-report JSPE

Nursing Student Version R empathy items was conducted on the sample of nursing

school seniors (n = 598) of the 14 nursing school programs. Prior to running the analysis

with SPSS Graduate Student Version 13, the data were screened by examining the

descriptive statistics on each item, with results displayed in Table 4. Means for each item

variable ranged from 6.56 to 3.88, and standard deviations ranged from .97 to 1.6,

indicating a heterogeneous sample group. Inter-item correlations were a mean of .182

with minimum of -.112 to a maximum of .507. Because of the large sample size, the

variables-to-cases ratio was deemed adequate.

Table 4

Descriptive Statistics JSPE Nursing Student Version R (n = 598)

Variable	Mean	S.D.
I believe that emotion has no place in the treatment of medical illness (reversed)	6.56	.97
Patients feel better when their nurses understand their feelings	6.41	1.00
Understanding body language is as important as verbal communication in nurse-patient relationships	6.36	1.05
Attention to patients' emotions is not important in history taking (reversed)	6.34	1.15
Nurses' understanding of the emotional status of their patients, as well as that of their families is one important component of the nurse-patient relationship.	6.31	.97
I believe that empathy is an important therapeutic factor in medical treatment	6.31	.99
Patients' illnesses can be cured only by medical or surgical treatment; therefore, nurses' emotional ties with their patients do not have a significant influence in medical or surgical treatment (reversed)	6.28	1.15
Nurses should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language.	6.14	1.15
Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints (reversed)	6.14	1.24
Attentiveness to patients' personal experiences does not influence treatment outcomes (reversed)	6.04	1.15
Nurses' understanding of their patients' feelings and the feelings of their patients' families does not influence medical or surgical treatment.	6.01	1.47

(table continues)

Table 4 (continued)

Variable	Mean	S.D.
Patients value a nurse's understanding of their feelings which is therapeutic in its own right.	5.99	1.11
I do not enjoy reading non-medical literature or the arts (reversed)	5.88	1.64
Nurses should try to stand in their patients' shoes when providing care to them.	5.59	1.33
Empathy is a therapeutic skill without which the nurse's success is limited.	5.49	1.59
A nurse's sense of humor contributes to a better clinical outcome	5.22	1.41
It is difficult for a nurse to view things from patients' perspectives (reversed)	4.57	1.34
Nurses should try to think like their patients in order to render better care	4.47	1.44
Because people are different, it is difficult to see things from patients' perspectives (reversed)	4.42	1.51
Nurses should not allow themselves to be influenced by strong personal bonds between their patients and their family members (reversed)	3.89	1.47

Using the Kaiser-Guttman retention criterion of eigenvalues greater than 1.0, a five factor solution provided the clearest extraction. These five factors accounted for 50.62% of the total variance. Table 5 presents the 20 items and their factor correlation loadings. Communalities were fairly high for each of the 20 items, with a wide range of .30 to .74. Factors are discussed and re-named by the researcher to reflect the overall predominant theme displayed by the cell group. Meyer et al. suggests this method based on the works cited by most statisticians. Coefficients less than .40 were eliminated from consideration, as they were not strongly related to the factor (Meyer et al., 2007).

Table 5

Factor Analysis (Rotated). Extraction Method: Principal Component Analysis, Rotation

Method Varimax with Kaiser Normalization

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Attention to patients' emotions is not important in history taking (reversed)	**.703**				
Attentiveness to patients' personal experiences does not influence treatment outcomes (reversed)	**.690**				
I believe that emotion has no place in the treatment of medical illness (reversed)	**.623**				
Patients' illnesses can be cured only by medical or surgical treatment; therefore, nurses' emotional ties with their patients do not have a significant influence in medical or surgical treatment (reversed)	**.622**				
Nurses' understanding of the emotional status of their patients, as well as that of their families is one important component of the nurse-patient relationship.	**.561**				
Nurses should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language.	**.547**				
Nurses' understanding of their patients' feelings and the feelings of their patients' families does not influence medical or surgical treatment.	**.541**				
Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints (reversed).	**.524**				
I believe that empathy is an important therapeutic factor in medical treatment	**.443**				
Understanding body language is as important as verbal communication in nurse-patient relationships		**.740**			
Patients feel better when their nurses understand their feelings		**.683**			

(table continued)

Table 5 (continued)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A nurse's sense of humor contributes to a better clinical outcome		.511			
Patients value a nurse's understanding of their feelings which is therapeutic in its own right.		.437			
Nurses should try to think like their patients in order to render better care.			.777		
Nurses should try to stand in their patients' shoes when providing care to them.			.650		
Because people are different, it is difficult to see things from patients' perspectives (reversed).				.850	
It is difficult for a nurse to view things from patients' perspectives (reversed).				.823	
I do not enjoy reading non-medical literature or the arts (reversed).					.617
Empathy is a therapeutic skill without which the nurse's success is limited.					.598
Nurses should not allow themselves to be influenced by strong personal bonds between their patients and their family members (reversed)					.585

Factor 1: "Emotional Engagement" (eigenvalues = 4.83) accounted for 24.15 % of the variance and contained nine items; **Factor 2**: "Nurse Relationship" (eigenvalues = 1.84) accounted for 9.19% of the variance and contained four items; **Factor 3**: "Patient Identification" (eigenvalues = 1.34) accounted for 6.71 % of the variance and contained two items; **Factor 4**: "Patient's Perspective" (eigenvalues = 1.08) accounted for 5.42% of the variance and contained two items; and **Factor 5**: "Nursing as an art" (eigenvalues = 1.03) accounted for 5.14% of the variance and contained three items. Corrected item-total

correlations ranged from .190 to .559, and Cronbach's coefficient alpha ranged from .77

to .79 among the five factors, indicating fairly good subscale reliability.

The Nursing Student Empathic Communication Questionnaire reliability

estimates were computed using Cronbach's alpha coefficient for the five item constructs

included in the questionnaire. The results are displayed in Table 6. These are program

effectiveness, academic sources, exposure to patient care situations, perceived

competency as a result of the nursing program instruction, and curricular emphasis.

Cronbach's alpha coefficients ranged from the highest (.83) of the time and emphasis of

curriculum on empathic communication to the lowest (.63) of the exposure to patient care

situations, resulting in a median of .77.

Table 6

Nursing Student Empathic Communication Questionnaire Components

Questionnaire Concept/Variable	# of Items	Mean	S.D.	Cronbach's Alpha
Curricular Emphasis	5	14.96	3.49	.83
Perceived competency	8	27.03	5.86	.80
Program effectiveness	4	15.40	2.84	.77
Academic Sources	8	25.75	5.15	.70
Academic Exposure	6	14.61	3.22	.63

To what extent do predictor scales of the Nursing Student Empathic Communication Questionnaire (a) academic exposure to patient care situations, (b) curricular emphasis during the nursing program, (c) perceived program effectiveness, and (d) academic sources predict nursing student's orientation or attitudes toward empathy in patient care as measured by JSPE Nursing Student Version R total scores?

Overview of Descriptive Statistics

Correlational analysis between the JSPE Nursing Student Version R totals with the four Nursing Student Empathic Communication Questionnaire constructs/variables yielded correlations ranging from the highest correlation of Program effectiveness (.168) to the lowest correlation of -0.46 for the construct variable of Academic Exposure. Other correlations between the JSPE Nursing Student Version R were Academic Sources (.143), and Curricular Emphasis (.063).

Overview of the Full Model Results

For the dependent variable, student's orientation or attitudes toward empathy in patient care (JSPE Nursing Version-R total scores), a multiple regression procedure was performed with four independent variables. As described in the methods section, a backward elimination procedure was performed to first examine a full model with all four predictors and then restrict the final model to those variables that contributed beyond what would be expected by chance (Pedhauzur, 1997). The most important criterion is that of meaningfulness of the predictor to the equation (Pedhauzur, 1997). Summaries of

the full and restricted model results of the multiple regression analyses for the student's

orientation or attitudes toward empathy in patient care (JSPE Nursing Version- R total

scores) as the dependent variable is represented in Table 7.

Table 7

Dependent Variable: Student's Orientation or Attitudes toward Empathy in Patient Care

(JSPE Nursing Version-R total Scores)

INDEPENDENT VARIABLE	r	Semi-partial correlation	Beta (Full)	Beta (Restricted)
Program effectiveness	.168***	.111	.142	.133
Academic Sources	.143**	.088	.113	.107
Academic exposure	-.046*	-.100	-.108	-.112
Curricular emphasis	.063	-.022	-.027	removed

Full Model: F = 6.679, df (4, 592), p < .001

*p <.05, **p < .01, ***p < .001

Restricted model: F = 8.811, df (3,593), p < .001

Three of the four independent variables, program effectiveness, academic

exposure, and academic sources were statistically significant (p < .05). The independent

variable, curricular emphasis, was removed from the full model due to lack of

significance (p =.576). Table 7 displays the independent variables and their respective

zero-order and semi-partial correlations. Program effectiveness and academic sources accounted for the highest proportion of variance.

The restricted model comparisons are presented in Table 7. R-squared values and standard error of the estimate are statistically unchanged (.001) from the full model R^2 yielding .043 and the restricted model .043 with the removal of curricular emphasis. Standard error of the estimate in both the full model and the restricted was 11.28.

The full model explained 4.3% of the variance, with an F = 6.679 and the restricted model, explained 4.3% of the variance, with F = 8.81. The difference between these two models was not statistically significant (p > .05), so the more parsimonious model was accepted. To further examine which aspects of program effectiveness, academic exposure, and academic sources related to student's orientation or attitudes toward empathy in patient care (JSPE Nursing Version- R total scores), follow-up regression analysis was performed using specific items from these subscales. As with the overall regression, a backward elimination approach was taken to obtain the most parsimonious model.

Table 8 describes each sub-construct (individual questions contained in the variable) of the predictors that were utilized in the backward regressions. Included in these are academic exposure, program effectiveness, and academic sources. Curricular emphasis was not further examined after being removed from the overall regression analysis. These follow-up regressions resulted in effect sizes greater than that of the overall regression with R^2 values ranging from 5.4% to 11.6%, compared to just 4.3%.

Table 8

Sub-construct Questions for Independent Variables

Variable	No. of Items		R^2		S.E.	
	Full	Restrict	Full	Restrict	Full	Restrict
Program Effectiveness	4	3	.059	.056	11.20	11.20
Academic Sources	8	4	.054	.046	11.27	11.27
Academic Exposure	6	4	.116	.113	10.88	10.88

Program Effectiveness and Student Attitudes toward Empathy in Patient Care

Backward elimination regression was performed on the four questions regarding

program effectiveness as the independent variable and student's attitudes toward empathy

in patient care (JSPE Nursing Student Version R total scores) as the dependent variable.

In the full model, program effectiveness had the largest Beta value. Results are displayed

in Table 9. The overall full model resulted in an R^2 of .059 (F = 9.32, p < .001, standard

error of the estimate 11.20). Question 2, "My ability to empathically communicate with

patients and families has improved since the start of my program", was eliminated. The

remaining three questions retained in the restricted model were Question 1 (Beta .098):

"Overall, my nursing program has been effective in preparing me to be competent in

empathically communicating with patients and families", Question 3, (Beta -.125): "I

receive consistent feedback among all my faculty members regarding core competency

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behaviors to communicate therapeutically with patients and families", and Question 4,

"Empathic communication skills are valued by my faculty", Beta .225.

Table 9

Sub-variables for Program Effectiveness for Restricted Model

Sub-variables	Beta	sig
Q4. Empathic communication skills are valued by my faculty	.225	.001
Q3. I receive consistent feedback among faculty members.	-.125	.011
Q1. Overall, my nursing program has been effective in preparing me to be competent in empathically communicating with patients and families.	.098	.043

Academic Sources and Student Attitudes toward Empathy in Patient Care

Backward elimination regression was performed on the eight questions regarding the construct of the independent variable Academic Sources and student's attitudes toward empathy in patient care (JSPE Nursing Student Version R total scores) as the dependent variable. This process resulted in the removal of role playing, post-clinical discussions with peers and family, classroom teachers, and practicing nurses. The more parsimonious model was accepted. Sub-variables are depicted in Table 10. Full model values yielded R-squared value of .054, Standard Error of the Estimate 11.27, df (8,587), F = 4.15, R-squared value for the restricted model yielded .046, with a standard error of

the estimate 11.27, df (4,591), F = 7.11, p < .001, which differed from the full model, R^2

change < -.004, and F-change of 2.30 (p>.05).

Table 10

Sub-variables for Academic Sources

Sub-variables	Beta	sig
Clinical teachers	.154	p < .001
Lecture Content	.115	.008
Simulation with Computers	.109	.014
Journal Entry personal reflections	.071	p >.05

Academic Exposure and Student's Attitudes toward Empathy in Patient Care

Backward elimination regression was performed using the questions contained in

the construct of academic exposure as predictors with the dependent variable of student's

attitudes toward empathy in patient care (JSPE Nursing Student Version R total scores).

The R^2 values for academic exposure were .116, with the standard error of estimate

10.88. The R^2 value indicates that 11.6% of the variance can be explained with the six

questions included in the academic exposure construct. The F value was significant at

12.94, df (6,589). The results of this regression analysis are displayed in Table 11.

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Table 11

Sub-variable Analysis for Academic Exposure on Restricted Model

Sub-variables	Beta	sig
8f. I have received negative feedback/remediation on my clinical performance for "less than acceptable" therapeutic communication with a patient or family member.	-.294	.001
8a. The number of times I (or my clinical group peers) discussed empathic communication in a post-conference with my clinical instructors.	.100	.012
8e. Patients/families have made positive comments specifically about my communication ability in "understanding their perspective"	.089	.030
8d. I have provided nursing care to a patient's family member(s) immediately following post-news of the patient's terminal condition.	-.077	.069

During the backward regression, four questions were retained in the final restricted model. Question 8b, "I have provided nursing care to patients that have experienced uncontrolled pain in my clinical rotation", and Question 8c, "I have provided nursing care to a patients that have been given a recent chronic disease diagnosis (such as diabetes, congestive heart failure). Question 8d, "I have provided nursing care to a patient's family member (s) immediately following post-news of a patient's terminal condition" was retained in the third model, but was significant at p = .069.

Beta values and the standard error of estimate are indicated. The highest positive

Beta value was from question 8a, which are discussions between clinical instructors and

clinical group students. Question 8f, "I have received negative performance feedback or

remediation on my clinical performance for "less than acceptable" therapeutic

communication with a patient or family member", was significant at the p < .001,

represents the highest Beta value, though negative (-.294), which is discussed further in

Chapter 5.

Research Question 4a

To what extent do nursing program components (program effectiveness,

curricular emphasis, academic exposure, and academic sources) predict student's

perceived competence to empathically communicate with patients and families as a result

of their nursing program instruction?

Research Question 4b

To what extent does orientation or attitudes toward empathy in patient care (JSPE

Nursing Student Version R Total scores) contribute to the prediction of perceived

competence above and beyond program components in Research Question 4a?

Overview of the Full Model Results

For the dependent variable, perceived competence, a multiple regression

procedure was performed with four independent variables. As described in the methods

section, a backward eliminative procedure was performed to first examine a full model

with all four predictors and then restrict the final model to those variables that contributed

beyond what would be expected by chance (Pedhauzur, 1997). The most important

criterion is that of meaningfulness of the predictor to the equation (Pedhauzur, 1997). Summaries of the full and restricted model results of the multiple regression analyses for the perceived competency category dependent variable is represented in Table 12.

Table 12

Dependent Variable: Student Perceived Competence in Present Ability as a Result of Nursing Program Instruction

INDEPENDENT VARIABLE	r	Semi-partial correlation	Beta (Full)
Academic exposure [a]	.387***	.282	.306
Curricular emphasis [a]	.329***	.127	.152
Program effectiveness [a]	.313***	.101	.130
Academic Sources [a]	.300***	.031	.039
Attitudes toward empathy (JSPE Nursing Version-R totals)[b]	.129***	.104	.106

*p < .05, **p < .01, ***p < .001

Full Model: F = 42.71, df(4, 592), p < .001

Restricted model: F = 56.52, df(3,593), p < .001

a – R^2 = .224, F (4,592) = 42.715, p < .001

b – R^2 Change = .011, F (1, 591) = 8.311, p = .004

Three of the four independent variables, program effectiveness, academic

exposure, and curriculum emphasis were statistically significant ($p < .05$). The

independent variable, academic sources, was removed from the full model due to lack of

significance (.269). Table 12 displays the independent variables and their respective r-

values and semi-partial correlations. Academic exposure accounted for the highest

proportion of variance after controlling for the other independent variables, followed by

program effectiveness and curricular emphasis. The independent variable, academic

sources was removed in the following backward regression analysis.

The full model explained 22.4% of the variance, with an $F = 42.71$ and the

restricted model explained 22.2% of the variance, with $F = 56.52$. The difference between

these two models was not statistically significant ($p > .05$), so the more parsimonious

model was accepted.

The restricted model comparisons are presented in Table 12. R-squared values

and standard error of the estimate are statistically changed (.001) from the full model R^2

yielding .224 and the restricted model .222 with the removal of academic sources.

Standard error of the estimate in both the full model and the restricted was 5.18.

Research Question 4b

To what extent does orientation or attitudes toward empathy in patient care (JSPE

Nursing Student Version R Total scores) contribute to the prediction of perceived

competence above and beyond program components? A hierarchical regression was used

to examine the extent to which attitudes toward empathy were related to perceived

competence after controlling for the influence of four program components. Table 12

summarizes the results for the hierarchical regression analysis. Overall, the four program

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components resulted in statistically significant (F (4,592) = 42.715, p < .001). The addition of attitudes toward empathy resulted was also statistically significant F (1, 591) = 8.311, p = (.004). The corresponding effect sizes are noteworthy. Whereas the four program components contributed 22.4%, the addition of attitudes toward empathy only contributed 1.1%.

To further examine which aspects of program effectiveness, academic exposure, and curricular emphasis, follow-up regression analysis was performed using specific items from these subscales addressed in Research Question 4a. As with the overall regression, a backward elimination approach was taken to obtain the most parsimonious model.

Table 13 describes each sub-construct (individual questions contained in the variable) of the predictors that were utilized in the backward regressions. Included in these are academic exposure, curricular emphasis, and program effectiveness. Academic sources were removed after the restricted model.

Table 13

Sub-construct Questions for Independent Variables

Variable	No. of Items		R^2		S.E.	
	Full	Restrict	Full	Restrict	Full	Restrict
Academic Exposure	6	5	.191	.187	5.29	.530
Program Effectiveness	4	2	.115	.113	5.53	5.55
Curricular Emphasis	5	3	.112	.112	5.55	5.54

Academic Exposure and Perceived Competence

Backward elimination regression was performed using the questions contained in

the construct of academic exposure as predictors with the dependent variable of perceived

competence. Academic exposure was utilized for further regression analysis because it

had the largest Beta value from the previous full model analysis. The R^2 values for

academic exposure were .191, with the standard error of estimate 5.29. The R^2 value

indicates that 19% of the variance can be explained with the six questions included in the

academic exposure construct. The F value was significant at 23.135, df (6,589). The

results of this regression analysis are displayed in Table 14.

Table 14

Sub-variable Analysis for Academic Exposure

Sub-variables	Beta	sig
8e. Patients/families have made positive comments specifically about my communication ability in "understanding their perspective"	.242	.001
8a. The number of times I (or my clinical group peers) discussed empathic communication in a post-conference with my clinical instructors.	.171	.001
8c. I have provided nursing care to patients that have been given a recent chronic disease diagnosis (such as diabetes, congestive heart failure).	.115	.007

(table continues)

Table 14 (continued)

Sub-variables	Beta	sig
8f. I have received negative feedback/remediation on my clinical performance for "less than acceptable" therapeutic communication with a patient or family member.	-.100	.011
8b. I have provided nursing care to patients that have experienced uncontrolled pain in my clinical rotation.	.098	.020

During the backward regression, five questions were retained in the analysis. The question that was not statistically significant, and was removed was Question 8d, "I have provided nursing care to a patient's family member(s) immediately following post-news of the patient's terminal condition". The final restricted model consisted of five items and yielded an R^2 of .187, and a standard error of the estimate of 5.3.

Beta values and the standard error of estimate are indicated. The highest Beta value was from question 8e, which is performance based on the perceptions of patients and families of the student's ability. Discussions between clinical instructors and clinical group students (Question 8a) followed. Question 8f was not significant at the $p < .005$, but was included with .011 because it represents a negative Beta value, which could mean that negative performance feedback or remediation, while still significant, does not occur in the clinical setting.

Curricular Emphasis and Perceived Competence

Full model values yielded R-squared value of .112, Standard Error of the Estimate 5.55, df (5,594), F = 14.91, Pre-nursing (Beta = .109), senior year academics (Beta =

.106), and clinical experiences in the junior year (Beta =.154) were significant at p >

.005. R-squared value for the restricted model yielded .112, with a standard error of the

estimate 5.54, df(3,594), F = 24.78, which did not significantly differ from the full model,

R^2 change < .001.

     Backward elimination regression was performed on the five questions regarding

the construct of curricular emphasis on empathic communication in the nursing program

(independent variable) and perceived competency as the dependent variable. A backward

regression removed clinical experiences in the senior year, and removed junior year

academics. Results are displayed in Table 15.

Table 15

Sub-variables for Curricular Emphasis

Sub-variables	Beta	sig
Clinical experiences in Junior year	.175	.001
Senior year academics	.136	.007
Pre-nursing	.113	.006

Program Effectiveness and Perceived Competence

     Backward elimination regression was performed on the four questions regarding

overall program effectiveness as the independent variable and perceived competency as

the dependent variable. Results are displayed in Table 16. Backward regression was

performed with all questions in the full model (F = 19.35, R^2 = .115, standard error of the

estimate= 5.53). As a result of the backward elimination process, Question 4 (Empathic

skills are valued by my faculty) and removed Question 2," My ability to empathically

communicate with patients and families has improved since the start of my program".

The remaining two questions were retained in the final restricted model. These were

Question 1 (Beta .112): "Overall, my nursing program has been effective in preparing me

to be competent in empathically communicating with patients and families", and

Question 3 (Beta .268): "I receive consistent feedback among all my faculty members

regarding core competency behaviors to communicate therapeutically with patients and

families".

Table 16

Sub-variables for Program Effectiveness in Restricted Model

Sub-variables	Beta	sig
I receive consistent feedback among faculty members.	.268	.001
Overall, my nursing program has been effective in preparing me to be competent in empathically communicating with patients and families	.112	.012

Summary

The four research questions were answered through use of various data analysis

techniques. The JSPE Nursing Student Version R was initially analyzed by comparative

analysis with the JSPE S-Version and through factor analysis. Factor analysis yielded

five main factors, which were renamed. Additionally, total JSPE Version R totals were selected for inclusion as an independent variable along with the Nursing Student Empathic Communication Questionnaire sub-constructs, and the correlations between the two instruments were analyzed. These sub-constructs (predictors) consisted of academic exposure (to clinical situations), curricular expectations, program effectiveness and academic sources.

The use of student attitudes toward empathy in patient care (JSPE Nursing Student Version R total scores) was used as the independent variable in hierarchical regression analysis to examine the extent to which attitudes toward empathy were related to perceived competence after controlling for the influence of the four program components of the Nursing Student Empathic Communication Questionnaire. Program components did not relate strongly with attitudes toward empathy in patient care (R^2 = 4.3%), but did relate with student perceived competency to empathically communicate with patients and families as a result of nursing instruction (R^2 = 22%). The primary predictor of student attitudes toward empathy in patient care and perceived competency was in the follow-up regressions on the questions within the component "academic exposure". These results are discussed in Chapter 5 as it has implications for nursing education in terms of establishing utility considerations of the measurement of attitudes toward empathy in nursing programs and predictors of perceived competence.

V. DISCUSSION

Empathy and empathic communication are critical to the practice of nursing. The purpose of this study was to examine baccalaureate nursing student seniors' perceptions of program effectiveness, academic experiences, curricular emphasis, and academic sources in predicting perceived competence as a result of the instruction in preparation and teaching of empathic communication with patients and families, as well as measure student attitudes toward empathy in patient care. The need for improved understanding by nursing educators of teaching methods, effectiveness of clinical and academic experiences with perceived nursing student competence are necessary to improve nursing instruction.

An additional purpose of this study is to perform psychometric evaluation of the JSPE Nursing Student Version R to confirm empirical relationships among a set of variables determined in the literature to be associated with empathy and explore the underlying constructs and hence contribute to the construct validity associated with measuring empathic attitudes of nursing students.

The research was based on two hypotheses which include (a) the extent that students who perceived that they were effectively taught empathic communication in their nursing programs would rate their perceived competency in empathically communicating with patients and families as higher than those students who perceived

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their nursing program as less effective, and (b) the extent that students who perceived that they were more effectively taught empathic communication in their nursing programs would have higher scores on the JSPE Nursing Student Version R, thus indicating more positive attitudes toward empathy in patient care.

If a relationship exists in the areas supported in the literature as indicators of program effectiveness, which include (a) student exposure to patient care scenarios in the clinical setting; (b) curricular time and emphasis on empathic communication; (c) the role of student attitudes toward empathy in patient care; (d) perceived higher effectiveness of nursing programs in preparation of empathically communicating with patients and families; and (e) opportunities to learn or influenced to use empathic communication from academic and clinical sources, then applying the knowledge about its existence might contribute to understanding teaching techniques of empathic communication that enhance faculty's efforts to teach students effectively.

The research was organized using four research questions. The four research questions were (a) determining if a statistical difference existed between the JSPE Version-S and the JSPE Nursing Student Version-R; (b) determining what unique themes, dimensions, and factors emerge from the JSPE- Nursing Student Version-R scores; (c) determining to what extent exposure to patient care situations, curricular emphasis, perceived program effectiveness and academic sources predict student attitudes toward empathy in patient care; and (d) determining to what extent exposure to patient care situations, curricular expectations, perceived program effectiveness and academic sources predict perceived competence of nursing student's ability to empathically communicate with patients and their families.

The first research question compared scores between the two versions of the tools using a one-sample t-test. The second research question was addressed through use of exploratory factor analysis of the JSPE Version-R questionnaire through survey research. The third and fourth research questions were addressed through multiple regression analysis of the sub-components of the Nursing Student Empathic Communication Questionnaire, with student attitudes toward empathy in patient care (JSPE Nursing Student Version-R total scores) as the dependent variable and sub-components of the Nursing Student Empathic Communication Questionnaire, with student perceived competency to empathically communicate with patients and families as the dependent variable.

Finally, hierarchical regression was used to examine the extent to which attitudes toward empathy were related to perceived competence after controlling for the influence of the four program sub-components of the Nursing Student Empathic Communication Questionnaire. The design of the study was explanatory in nature, using a non-experimental method. Baccalaureate nursing student seniors from 14 programs in the Southeast were selected as the survey population.

Data were initially analyzed using descriptive statistics. This included means, standard deviations, frequencies, and percentages. Additionally, Cronbach's alpha coefficients were conducted for reliability analysis. Chi-square analyses determined that the sample population (n = 600) was representative of the total baccalaureate nursing school seniors in the southeast from the programs. The multiple regression analysis was initially conducted through the use of backward elimination regressions to estimate a full

model and create a more parsimonious model. The dependent variable was perceived competency to empathically communicate with patients and families.

Limitations

Prior to discussing the results in detail, limitations of the study need to be acknowledged, as this affects the interpretation of the results. First, there are some considerations regarding validity that must be addressed. Internal invalidity can arise from various sources as discussed by Campbell and Stanley (1968).

The historical occurrence of events that potentially coincided with the collection of data is of concern. There is a potential for participant perspectives to be altered, either heightened or diminished, due to curricular content discussed in the academic setting across the various fourteen nursing programs prior to data collection. Additionally, the presence of particular clinical situations or dialog with family members or faculty could affect student response as empathic content could be potentially reinforced prior to administration of the questionnaire. With each program being collected at varied times throughout the semester coinciding with curricular content, there is a potential for a stimulated interested in the topic beyond the control of the researcher. Related to questionnaire administration timing concerns in the form of order effects that could potentially result from student fatigue, variance in classroom teaching introductions and instructions prior to researcher explanation, classroom stress, and student interest and availability depending on whether the questionnaire was administered prior to class or at the conclusion of the classroom instruction. This also applies to the wide variance in questionnaire administration throughout the semester, ranging from late-September to

late-November that could potentially impact student participation. Senior level students could potentially have increased pressures and stress related to upcoming deadlines as well as fatigue and burnout with data collection that occurred at institutions at the end of the semester with anticipated graduation.

Campbell and Stanley (1968) discuss the need for study findings to be generalized to different subjects, settings and experimenters, thus possessing external validity. There were some limitations of this study consisting of experimenter effect, and measurement of the dependent variable through instrumentation. Experimenter effect by the researcher and potential for participating faculty sensitization may influence certain responses by the students. The use of standardized scripts by the researcher prior to each data collection was devised to limit unintentional influence. However, verbal comments made by nursing program representatives/faculty and student perception of faculty support of research study prior to data collection could result in bias in responses to questions on the questionnaires as well as influence student participation in the study.

Measurement of the dependent variable (perceived competence in communicating empathically with patients and families and student's attitudes toward empathy in patient care as measured by JSPE Nursing Student Version R total scores) could influence validity of the study. The use of a researcher-designed tool that has not been previously tested, nor subjected to prior factor analysis variable modifications could affect the generalizability of results. The use of expert and non-expert pilot testing as described in Chapter 3 was utilized to increase content and face validity of the Nursing Student Empathic Communication Questionnaire. Consideration was made to incorporate variables consistent with the examination of program effectiveness as cited in the

literature. For instance, parity of number of questions related to clinical, academic and curricular/program entities was attempted.

The use of senior-level nursing students without prior use of randomized experimental and control groups (exposed versus not-exposed) to neither the program components, nor a pre test-post test evaluation to examine the magnitude of changes is problematic. This is due to a lack of baseline to determine the extent of program effectiveness in impacting student attitudes, especially given the supportive literature addressing decrease of empathic ability occurring in seniors.

The use of two scales that are measuring student perception and attitudes, which are subjective, are less desirable than using criteria that is more objective, such as standardized test scores, behavioral skills, or performance standards. In the case of measuring empathic communication, it would be helpful to know what scores or the nature of their clinical performance in communicating empathically with patients. However, if this information is the standard pass/fail criteria, then this information is not as usable due to lack of variability. Actual behavioral skills in empathically communicating were not assessed, nor triangulated with other means, such as peer and patient evaluations.

Implications

There was not a statistical difference between the JSPE Version-S (developed for medical and other health professions students) and the JSPE Nursing Student Version-R. There was a larger variability in range of scores in the nursing population, which might be attributable to the greater diversification in the fourteen nursing programs throughout

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the Southeast than was represented in the medical student sample size from one institution (Jefferson Medical College). The implications for nursing education lend support for contribution of nursing student data that can be utilized in performing psychometrics on measuring student attitudes toward empathy in patient care. The non-significant findings will contribute to further studies that can compare the S-Version and the R-Version to improve reliability and validity of the R-Version.

It is noteworthy that there was no statistical difference in student orientations toward empathy in patient care between medical and nursing students. From a practical standpoint, there are potential opportunities for collaborative efforts between nursing and medical school programs to share resources of clinical experiences, scenario development, research, and faculty expertise.

There were five unique themes, dimensions, and factors that emerged from the JSPE Nursing Student Version-R scores. These results can be supportive through additional studies to screen for the best items for inclusion and modification in the Nursing Student Version-R for use in nursing student populations. This study provided preliminary data that can be used for meta-analytic and comparative studies that could be used to improve and validate this scale to construct and modify items particularly for nursing students.

Student's Attitudes toward Empathy in Patient Care

The best component of the Nursing Student Empathic Communication Questionnaire, which included (a) academic exposure to patient care situations, (b) curricular emphasis during the nursing program, (c) perceived program effectiveness, and (d) academic sources to predict nursing student's orientation or attitudes toward empathy

in patient care as measured by JSPE Nursing Student Version-R total scores were questions included in academic exposure. The least predictive of student attitudes regarding empathy in patient care was time and emphasis of curriculum on empathic communication in the nursing program, including pre-nursing through the senior year. The implications to nurse education is to formatively evaluate program instruction to ensure that empathic attitude development and enhancement is not being diminished or negatively impacted, perhaps due to student fatigue, lack of reinforcement, or ineffectual remediation.

The most statistically significant question in academic exposure regarded the student receiving negative feedback or remediation. The relatively high negative Beta, as compared to other questions in this category, could be attributed to student's having negative attitudes regarding empathy in patient care, confusion as to what constitutes "remediation", or lack of any feedback regarding performance of empathic communication in the clinical setting. The role of faculty feedback is particularly emphasized in the research findings of Mozingo et al. (1995) as related to student's desire for more positive feedback from faculty members.

Comprehensive tools to adequately assess and document clinical proficiency of empathic communication need to be established and maintained for consistency between faculty and clinical instructors as described by Schirmer et al. (2005). This finding is also described in literature cited by Kruijver et al. (2000) and Winefield and Chur-Hansen (2000) in the evaluating the outcomes of communication skill teaching and changes of attitudes in empathy.

Though less statistically significant, the question regarding the number of times that empathic communication was discussed in post-conference with clinical instructors reinforces the pivotal role of the clinical instructor and the import of the clinical experience. There needs to be strong infrastructure, accountability and communication in place between the faculty delivering academic concepts and faculty, instructors, or staff that are interfacing with the student in the clinical arena. It is imperative for clinical faculty/instructors to reinforce theoretical content and have practical and meaningful discussions to instruct, remediate and prevent student fear and burnout from potentially emotional patient care situations.

Several researchers (Deloney & Graham, 2003; de Lucio et al., 2000; Hall, 2006; Laidlaw et al., 2006; Mozingo, 1995), reinforced the importance of student's being able to feel supported and have their feelings affirmed after reflecting on caring for difficult patient care situations, as was evoked with the use of a dramatic patient coping with end-of-life issues. The complexity of issues facing students in the clinical setting dictates the need for increased trust and sensitivity by the clinical instructor to handle debriefings of patient care issues in a professional manner. Issues that are discussed in the clinical site, while recently poignant can serve as important reflective training tools, if discussed immediately following clinical exposure.

Program effectiveness followed academic exposure as predicting student attitudes regarding empathy in patient care. The role of faculty is magnified in this program component, as the two most significant questions pertained to faculty influence. The highest Beta value was given to "empathic communication skills being valued by faculty", followed by student perception of "consistent feedback among faculty

members". The negative Beta value regarding feedback could be attributed to disparities in feedback among faculty or lack of any feedback from faculty. This component of feedback is emphasized in the works by Woolley and Jarvis (2007) to provide supportive feedback, but additionally have means available, such as video recordings, that can enhance learning.

Faculty and clinical instructor modeling and positive attitudes communication is critical for the training of positive attitudes and solid empathic communication techniques to be imparted to the student. The effective use of role modeling, as discussed by Price and Archbold (1997) was reinforced in this study. Their study explained the faculty's role increased the student's self-efficacy that resulted in improved ability to empathize.

Whether a particular model of feedback is followed or an eclectic approach to discussing empathic communication subject matter, there needs to be increased awareness and proficiency with those faculty or instructors that are guiding the post-conference clinical discussions. Failure to have trained faculty or clinical instructors that value empathic communication is tantamount to having instructors that are not technically proficient or are poor critical thinkers. The effectiveness of trained faculty in enhancing and providing empathic communication was discussed by Haq et al. (2004) and Butler et al. (2005). Positive interactions between healthcare professionals and through training can lower anxiety of students and improved clinical environments between professionals. Rosenfield and Jones (2004) reinforced the role of faculty assisting students in managing their stresses associated with confronting illness and suffering.

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Academic sources illuminated the role of clinical teachers as being the most statistically significant in predicting student's attitudes regarding empathy in patient care. Lecture content followed as most significant. The use of role play, lecture, computer simulation and journal reflections were supported in this study and throughout literature as effective means to teach empathic communication. However, more innovative techniques are needed to fully capture patient-care scenarios and family dynamics while in the clinical setting. For example, effective student's attitudes toward empathy in patient care might be improved if empathic communication lecture exercises were replaced with student interactions one-on-one with patient volunteers relating their perspectives coupled with journal entry personal reflections, as evidenced in literature cited by Reynolds et al. (1999).

Student's Perceived Competence to Empathically Communicate

Academic exposure, followed by program effectiveness and curricular emphasis were the most predictive of student's perceived competence to empathically communicate with patients and families as a result of their nursing program instruction. Academic sources were removed due to low statistical significance. The implication for nurse education highlights the need for significant attention to exposure of various types of patients from a communication standpoint, rather than strictly based on patient illness or pathology, and meaningful discussions of these patient situations during the post-conference time.

The implications to nurse educators also connects the constructs of perception of competency and the need for students to have been exposed to the opportunity to perform the task as illuminated by Sharp et al. (2003). As highlighted by Edwards et al. (2004)

there was a significant role of the clinical experience in promoting and contributing to greater student perception of competence and satisfaction. This finding is important to supporting the results from this study of academic exposure.

Curricular emphasis showed statistical significance in the need for ensuring communication proficiency in the junior year, to prevent the reinforcement of poor technique during the senior practicum, which could lead to decreased empathy and a loss in empathic communication ability. This finding was congruent with research performed by Layton (1979), which echoed the need for learning to occur early in the student's education to prevent established styles that are potentially ineffective. With senior level students performing in autonomous roles with practicum rotations, there is the potential for lack of faculty input, diverse selection of various types of patients, or remediation prior to graduation. Thus, as shown in this study, the junior year is pivotal to exposure to clinical situations involving empathic communication in developing student perceptions of competency.

Also statistically significant in this study were patients and family positive comments about empathic ability. This input from the patient is a critical element in evaluating student performance of empathic communication ability, as indicated by studies by Reynolds (1999), highlighting the role of measuring by patient's terms and While (1994) concludes that emphasis should be placed by nursing educators on performance in the clinical setting. As reinforced in Mozingo's (1995) study, the more students are exposed to patient situations and feel competent in their ability to empathically communicate; they seek out more opportunities and gain confidence in their ability.

In this study, nursing student's orientation and attitudes toward empathy in patient care (JSPE Nursing Student Version-R Total scores) did not contribute to the prediction of perceived competence to empathically communicate with patients and family members above and beyond program components, particularly questions regarding academic exposure. The implications for nurse educators is that the utility of the JSPE Nursing Student Version-R to predict senior nursing student's perceptions of competency to empathically communicate with patients and family members as a result of nursing program instruction is better accomplished by the use of program evaluation questions on the Nursing Student Empathic Communication Questionnaire. The interplay between knowledge, confidence, attitudes, and perceived skills in this study was highlighted as well in the study by Steginga et al. (2005), which evaluated a cancer nursing education course. The link with confidence and competence to relate to difficult patient situations reinforces the need for educational programs that explore these variables.

However, as cited earlier in the limitations discussion, the use of this tool is of potential benefit to nurse educators in establishing baseline measures of student attitudes longitudinally. Additionally this instrument has potential benefit with other predictors than perceived competency, such as clinical performance ratings and testing.

Summary

Empathy and empathic communication are complex entities, yet crucial to the practice of nursing. The role of nurse educators in teaching empathy effectively is necessary in addressing the recommendations from AACN in preparing professional nurses to enter practice. Nurses are presented daily with the opportunity to address patient

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and family needs in a patient-sensitive manner, inclusive of empathy and empathic communication.

Data from this study reinforce the need for greater attention to be focused in the realm of clinical instruction, to maximize faculty input and feedback, and reinforce theoretical tenants that are taught in the academic setting. With the role that exposure to clinical patient-care situations has in influencing student perceptions of competence, there are several practical steps that nurse educators can take to maximize patient outcomes and prepare students for entry into professional practice.

Teaching methods need to be examined and revised to determine effectiveness between time expenditure and maximum results. Research related to linking empathic communication with improved patient-care outcomes could advance the import of empathy. Improved patient care could exist in the form of greater care in obtaining patient and family input as to clinical performance of the nursing student. The use of patient and family input would provide greater insights as to clinical performance, than current practices utilizing clinical instructors or student self-reflection. Of the four empathic communication and empathy predictor variables, academic exposure to patient care situations in the clinical experience was most significant in two of the research questions.

Recommendations for Future Research

Based on the results of this study, recommendations for future research are:

- Continued evidence in support of the psychometrics of the JSPE Nursing Student Version R at various stages in the student's program (pre-nursing,

junior level, senior level) to determine program's effectiveness in producing positive or negative changes in attitudes toward empathy in patient care and perceived competence.

- Development of methods to "track" exposure of students to various patient situations requiring difficult empathic communication skills (such as angry or hostile patients, patients experiencing uncontrolled pain, patients and families that have been given recent post-news of terminal condition).

- Development of clinical performance system that provides variability in scoring. This tool should incorporate inputs from patients, peers, nurses, as well as documentation of specific remediation by faculty member or clinical instructor.

- Further use of the Nursing Student Empathic Communication Questionnaire to provide data as to usefulness of instrument in evaluating student perception of program effectiveness. This information could assist with both formative and summative evaluations of nursing programs. This questionnaire's sub-components might be useful in some aspects of professional development of the faculty and clinical staff members, such as providing training for deficient areas.

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APPENDICES

APPPENDIX A

SURVEY QUESTIONNAIRE — JSPE NURSING STUDENT VERSION R

Jefferson Scale of Physician Empathy
(Nursing Student Version R)

Instructions: Please indicate the extent of your agreement or disagreement with *each* of the following statements by writing the appropriate rating number on the <u>underlined</u> space provided before each statement. Please use the following 7-point scale (*a higher number on the scale indicates more agreement*):

1-------2-------3-------4------5-------6------7
Strongly Disagree   *Strongly Agree*

1. __ Nurses' understanding of their patients' feelings and the feelings of their patients' families does not influence medical or surgical treatment.

2. __ Patients feel better when their nurses understand their feelings.

3. __ It is difficult for a nurse to view things from patients' perspectives.

4. __ Understanding body language is as important as verbal communication in nurse-patient relationships.

5. __ A nurse's sense of humor contributes to a better clinical outcome.

6. __ Because people are different, it is difficult to see things from patients' perspectives.

7. __ Attention to patients' emotions is not important in history taking.

8. __ Attentiveness to patients' personal experiences does not influence treatment outcomes.

9. __ Nurses should try to stand in their patients' shoes when providing care to them.

10. __ Patients value a nurse's understanding of their feelings which is therapeutic in its own right.

11. __ Patients' illnesses can be cured only by medical or surgical treatment; therefore, nurses' emotional ties with their patients do not have a significant influence in medical or surgical treatment.

12. __ Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints.

13. __ Nurses should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language.

14. __ I believe that emotion has no place in the treatment of medical illness.

15. __ Empathy is a therapeutic skill without which the nurses's success is limited.

16. __ Nurses' understanding of the emotional status of their patients, as well as that of their families is one important component of the nurse-patient relationship.

17. __ Nurses should try to think like their patients in order to render better care.

18. __ Nurses should not allow themselves to be influenced by strong personal bonds between their patients and their family members.

19. __ I do not enjoy reading non-medical literature or the arts.

20. __ I believe that empathy is an important therapeutic factor in medical treatment.

APPENDIX B

INFORMATION LETTER

5 September 2006

Dr. _____
Assistant Dean, School of Nursing
_____ University
_____

Dear Dr. _____:

      I am writing to ask your help with a study I am performing for my Doctoral dissertation at Auburn University in Educational Foundations, Leadership and Technology. This study explores student empathy and perceptions of effectiveness of their nursing programs in teaching empathic communication skills. The study will contribute to the body of literature that addresses the significant concerns facing nursing faculty in regard to how students learn about communicating empathically, effectiveness of teaching methods, evaluation of student performance, and identifying perceived competencies of students in using effective therapeutic communication. The subject of empathic communication is of particular importance to me as a fellow nursing professional with over 23 years experience. I greatly acknowledge the vital role nursing faculty has in educating BSN students in providing tremendous patient care through their communicative ability as well as performance of technical skills after graduation.

      Your nursing program was selected through a convenience sampling of accredited, CCNE affiliated programs in the Southeast. The choice of utilizing accredited schools was important as it indicates tremendous professionalism and incredible commitment of your leadership as well as your staff. Upon your approval, I would like to request to conduct a research study using your senior-level nursing students at _____ University. Items are based upon constructs identified in the literature such as the role of curriculum, clinical experiences, and practical concerns toward teaching empathic communication. By understanding the student's perceptions, necessary information can be analyzed to improve the understanding of teaching concerns and barriers in nursing and thus ultimately lead to educating nurses that can improve health care through both their technical and communicative expertise.

      Results from the survey will be published in my dissertation, as well as submitted to professional journals upon completion. Your school's answers from the students are completely anonymous and will be released only in summary form in which no school can be identified. The questionnaires will be administered by myself during approved times, such as immediately following scheduled classes. The estimated time for instructions and completion of the two questionnaires will be approximately 15 minutes. Participation from the students is voluntary.

      If you would be interested in participating in this study, please contact me. I will then request a time to set up the meetings with the students. Presently, I have submitted this study for Auburn University IRB approval. I would like to begin data collection as

soon as I have received approval, which could be as early as mid- September. I will be glad to send you a copy of the two questionnaires upon your request.

If you have any questions, comments, or concerns regarding this study, I will be happy to talk with you further. My telephone number is (334) 826-9566. My e- mail address is Reedreb@auburn.edu. My committee chairman and advisor for this study is Dr. David Shannon at (334) 844-3071.

Thank you very much for your consideration.

Sincerely yours,

Libba Reed McMillan, RN MSN
Doctoral Candidate/ Auburn University
1903 North Ashe Court
Auburn, Alabama 36830
(334) 826-9566
reedreb@auburn.edu

APPENDIX C

NURSING STUDENT EMPATHIC COMMUNICATION QUESTIONNAIRE

Jefferson Scale of Physician Empathy
(Nursing Student Version R)

Instructions: Please indicate the extent of your agreement or disagreement with *each* of the following statements by writing the appropriate rating number on the <u>underlined</u> space provided before each statement. Please use the following 7-point scale (*a higher number on the scale indicates more agreement*):

1-------2-------3-------4-------5-------6-------7

Strongly Disagree   *Strongly Agree*

1. __ Nurses' understanding of their patients' feelings and the feelings of their patients' families does not influence medical or surgical treatment.

2. __ Patients feel better when their nurses understand their feelings.

3. __ It is difficult for a nurse to view things from patients' perspectives.

4. __ Understanding body language is as important as verbal communication in nurse-patient relationships.

5. __ A nurse's sense of humor contributes to a better clinical outcome.

6. __ Because people are different, it is difficult to see things from patients' perspectives.

7. __ Attention to patients' emotions is not important in history taking.

8. __ Attentiveness to patients' personal experiences does not influence treatment outcomes.

9. __ Nurses should try to stand in their patients' shoes when providing care to them.

10. __ Patients value a nurse's understanding of their feelings which is therapeutic in its own right.

11. __ Patients' illnesses can be cured only by medical or surgical treatment; therefore, nurses' emotional ties with their patients do not have a significant influence in medical or surgical treatment.

12. __ Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints.

13. __ Nurses should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language.

14. __ I believe that emotion has no place in the treatment of medical illness.

15. __ Empathy is a therapeutic skill without which the nurses's success is limited.

16. __ Nurses' understanding of the emotional status of their patients, as well as that of their families is one important component of the nurse-patient relationship.

17. __ Nurses should try to think like their patients in order to render better care.

18. __ Nurses should not allow themselves to be influenced by strong personal bonds between their patients and their family members.

19. __ I do not enjoy reading non-medical literature or the arts.

20. __ I believe that empathy is an important therapeutic factor in medical treatment.

NURSING STUDENT EMPATHIC COMMUNICATION QUESTIONNAIRE

The purpose of this questionnaire is to examine senior nursing student's perspectives regarding the teaching of therapeutic communication (including empathy) in their nursing programs. Understanding teaching techniques of empathic communication that work and that seem to not work will help nursing faculty's efforts to teach students effectively. Your individual responses on this questionnaire will remain anonymous. I greatly appreciate your assistance and wish you the best with your nursing career!

Please use the following definition for empathic communication to answer the following questions: **Empathic Communication is defined as a cognitive skill that includes the ability to understand the patient's/family perspective and experiences, combined with the ability to communicate this understanding.**

Section A:
Please indicate the extent to which you agree with each of the following statements regarding your nursing program using the scale below:

SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

	SD	D	N	A	SA
1. Overall, my nursing program has been effective in preparing me to be competent in empathically communicating with patients and families.	▯	▯	▯	▯	▯
2. My ability to empathically communicate with patients and families has improved since the start of my program.	▯	▯	▯	▯	▯
3. I receive consistent feedback among all my faculty members regarding core competency behaviors to communicate therapeutically with patients and families.	▯	▯	▯	▯	▯
4. Empathic communication skills are valued by my faculty.	▯	▯	▯	▯	▯
5. Empathy assessment should be a part of the selection criteria for nursing school.	▯	▯	▯	▯	▯
6. I would attend more classes on the topic of learning how to empathically communicate with patients and family if they were offered in my nursing program.	▯	▯	▯	▯	▯
7. Please rate the degree to which you learned or were influenced to use empathic communication from each of the following sources: (On a scale of 1-5, with 1=Not at all to 5= to a great extent):	**1**	**2**	**3**	**4**	**5**
a. Classroom teachers	▯	▯	▯	▯	▯
b. Clinical teachers	▯	▯	▯	▯	▯
c. Practicing nurses	▯	▯	▯	▯	▯
d. Lecture content	▯	▯	▯	▯	▯
e. Journal entry personal reflection	▯	▯	▯	▯	▯

	N	S	O	AEC	EC
f. Role-playing	☐	☐	☐	☐	☐
g. Simulation with computers	☐	☐	☐	☐	☐
h. Post clinical discussions with peers and faculty	☐	☐	☐	☐	☐
8. Please indicate the frequency you experienced the following patient care situations. (N= Never; S=Seldom; O=Often; AEC= Almost Every Clinical; EC= Every Clinical)	N	S	O	AEC	EC
a. The number of times I (or my clinical group peers) discussed <u>empathic communication</u> in a post-conference with my clinical instructors.	☐	☐	☐	☐	☐
b. I have provided nursing care to patients that have experienced uncontrolled pain in my clinical rotation.	☐	☐	☐	☐	☐
c. I have provided nursing care to patients that have been given a recent chronic disease diagnosis (such as diabetes, congestive heart failure).	☐	☐	☐	☐	☐
d. I have provided nursing care to a patient's family member (s) <u>immediately</u> following post- news of the patient's terminal condition.	☐	☐	☐	☐	☐
e. Patients/families have made positive comments specifically about my communication ability in "understanding their perspective."	☐	☐	☐	☐	☐
f. I have received negative performance feedback or remediation on my clinical performance for "less than acceptable" therapeutic communication with a patient or family member.	☐	☐	☐	☐	☐
9. Please indicate the extent to which you perceive you are competent in your present ability as a result of your nursing program instruction. (On a scale of 1-5, with "1"= Not competent to "5"=Highly Competent)	1	2	3	4	5
a. Empathically communicating with patient and family members regarding end-of-life decisions.	☐	☐	☐	☐	☐
b. Empathically communicating with the patient with uncontrolled pain.	☐	☐	☐	☐	☐
c. Empathically communicating with patients that have been given a recent chronic disease diagnosis (such as diabetes, congestive heart failure).	☐	☐	☐	☐	☐
d. Empathically communicating with a patient's family member (s) immediately following post- news of the patient's terminal condition.	☐	☐	☐	☐	☐
e. Empathically communicating with patients that are mentally ill/ psychiatric care situations.	☐	☐	☐	☐	☐
f. Empathically communicating with the elderly.	☐	☐	☐	☐	☐

	FFS	FS	NA	SE	FE
g. Empathically communicating with patients/ family from a different culture.	☐	☐	☐	☐	☐
h. Empathically communicating with patients who are identified by other members of the health care team as "difficult" (such as angry, demanding, rude, hostile, etc.)	☐	☐	☐	☐	☐
10. Please indicate the time and emphasis of curriculum on empathic communication in your nursing program (FFS= Fell far short of my needs; FS= Fell short of my needs; NA=Was necessary amount; SE= Somewhat exceeded that which was needed; FE= Far exceeded that which was needed)	**FFS**	**FS**	**NA**	**SE**	**FE**
a. Pre-Nursing	☐	☐	☐	☐	☐
b. Junior Year Academics	☐	☐	☐	☐	☐
c. Senior Year Academics	☐	☐	☐	☐	☐
d. Clinical experiences in Junior Year	☐	☐	☐	☐	☐
e. Clinical experiences in Senior Year	☐	☐	☐	☐	☐

SECTION B:

My primary area of clinical interest post graduation is					
☐ Adult Health	☐ Cardiac Step Down Unit	☐ Community Health	☐ Critical Care (ICU/CCU)	☐ Emergency/ Trauma	☐ Geriatrics
☐ Labor/ Delivery	☐ Maternal-Child	☐ Pediatrics	☐ Psychiatry	☐ Renal/ Hemodialysis	☐ Other
My Gender					
☐ Female			☐ Male		
My Age					
☐ 20-22 years	☐ 23-25 years	☐ 26-28 years	☐ 29-35 years		☐ 36 or older
My Ethnicity					
☐ African American	☐ Asian	☐ Caucasian	☐ Hispanic	☐ Native American	☐ Other

APPENDIX D

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB) PROTOCOL

EDUCATIONAL
FOUNDATIONS

LEADERSHIP AND
TECHNOLOGY

INFORMATION SHEET
For Research Study Entitled
Empathy and Empathic Communication: Nursing Student Perceptions of Program
Effectiveness, Academic Experiences, and Competence

You are invited to participate in a research study to examine senior nursing student's perspectives regarding the teaching of therapeutic communication (including empathy) in their nursing programs. This study is being conducted by Libba Reed McMillan, RN MSN, Doctoral Candidate, under the supervision of Dr. David Shannon, Professor, Educational Psychology. I hope to learn which teaching techniques, clinical experiences, and academic experiences are most effective in teaching nursing students to feel competent in their ability to communicate empathically with patients and families. You were selected as a possible participant because of your affiliation with an accredited nursing program.

If you decide to participate, I will ask you (via a USA representative), to participate in a one-time completion of two short questionnaires. It will take approximately 15 minutes. There will be no further contact with you post-completion of this study. This completed data will be placed immediately into an envelope by a USA representative, sealed, and mailed directly to my Auburn University office. These completed questionnaires will then be viewed by me and my dissertation chairman.

I hope that my research effort will result in improved understanding of which teaching methods, clinical experiences, and academic experiences improve student perception of program effectiveness and perceived competence to enter nursing practice.

Any information obtained in connection with this study will remain anonymous. Information collected through your participation may be used to fulfill my educational requirement in obtaining my PhD. These results may be published in a professional journal, and/or presented at a professional meeting. If so, none of your individual information or school's information will be directly identifiable. You may withdraw from participation at any time, without penalty. However, since you will be providing anonymous information, you will be unable to withdraw your data after participation since there will be no way to identify your individual information.

Your decision whether or not to participate will not jeopardize your future relations with Auburn University, or your USA nursing program.

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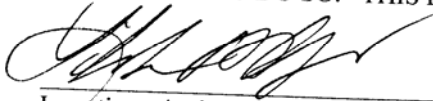
If you have any questions I invite you to ask them now. If you have questions later, I will be happy to answer them. You may reach me at home (334) 826-9566, e-mail reedreb@auburn.edu, or my faculty advisor, Dr. David Shannon at (334) 844-3071 or shanndm@auburn.edu.

For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

_____   11/1/06
Investigator's signature   Date

_____
Print Name

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APPENDIX E

FLYER TEMPLATE

CALLING ALL SENIOR NURSING STUDENT VOLUNTEERS!

Would you be willing to participate in a research study?

TOPIC: *Empathy and Empathic Communication: Student Perceptions of Program Effectiveness, Academic Experiences, and Competence*

: Immediately following/before your
_____class or actual TIME
: To better understand ways to improve student learning and faculty teaching of empathic communication with patients and families
: 15 minutes
: Fill out two short questionnaires—40 questions total

Your answers are completely anonymous

Libba McMillan, RN MSN
Doctoral Candidate
Auburn University