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PERCEPTIONS OF FACULTY CARING: COMPARISON OF DISTANCE AND TRADITIONAL GRADUATE NURSING STUDENTS

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ABSTRACT

The concept of caring has played a vital role in nursing education. Role modeling has been identified as the primary way to teach caring and has been investigated extensively. As caring has evolved, so has the ways in which we educate nurses. Countless institutions now offer distance education programs in nursing in an effort to address the nurse and nurse educator shortage. It is unclear, however, from the nursing education literature if the modeling of caring can be transferred to students in a distance learning environment. This study investigated the impact of learning environment, program satisfaction, and persistence on graduate nursing students’ perceptions of faculty caring measured by the Organizational Climate for Caring Questionnaire. The 162 participants were recruited from 76 different accredited institutions throughout five states. Preliminary review of the data revealed no variability in persistence among the sample as all students were planning to persist or were graduating. Therefore a two-way analysis of variance was conducted and found no significant interaction between learning environment and student satisfaction and no significant main effect for learning environment. Satisfied students, however, did perceive their faculty as more caring than unsatisfied students. Results from this study indicate that as students feel cared for by their faculty, they are more satisfied with their programs of study, which may lead to better outcomes and increased student retention rates. Furthermore, no differences were found among the three learning environments indicating that role modeling of caring can occur in the distance environment as in the traditional face-to-face environment. Nurse educators need to be aware of both caring and non-caring
behaviors they portray regardless of learning environment, and the impact they have on student satisfaction and student persistence.
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Chapter 1

Introduction

Caring in nursing practice, as well as nursing education, is certainly not a new concept. Although inherent in nursing since the days of Florence Nightingale, for several decades, nurse scholars have begun to rigorously study and debate the notion of caring. Nurse scholars have considered such issues as how to define and measure caring, if caring is a science, and how to teach caring (Beck, 2001; Berman, 1988; Cohen, 1993; Golden, 1993; Simonson, 1996). Through its evolution, the concept of caring has progressed in nursing education both formally in the overt curriculum and informally in the hidden curriculum. Regardless of how caring is integrated in the curriculum; nurse educators have agreed that caring is an essential component in nursing education, which is transmitted directly to nursing practice. As the concept of caring has grown in prominence in nursing curricula, the advancement of educational delivery methods has expanded exponentially as well. This growth has required nursing faculty to rethink how they translate knowledge in a new and often times intimidating learning environment. This study addressed the perception of the caring environment juxtaposed to the delivery system.

The introductory chapter discusses the background of the study, the problem and purpose of the study, the professional significance, as well as identifies assumptions, limitations, and delimitations of the research study.
Background of the Study

**Historical context.** According to Leininger (1981), “caring is the essence of nursing and the unique and unifying focus of the profession” (p. 3). After identifying the need for further research on the caring concept, Leininger, along with other esteemed colleagues such as Watson, Bevis, Murray, and Tanner, began to focus their efforts on implementing caring into nursing curricula. Many of these efforts first occurred during the first three National Care Conferences held between 1978 and 1980. Sparking a new interest in the phenomenon of caring, these conferences produced an enlightened and rejuvenated body of nursing science focused on interest and further research on caring as the “essence of nursing”.

Developed in 1986 by Dr. Jean Watson, the Center for Human Caring at the University of Colorado College of Nursing “was the nation’s first interdisciplinary center with an overall commitment to develop and use knowledge of human caring and healing as the foundation for transforming the health care system” (Watson, 2007, para. 2). In 1989, the Center supported, along with the International Association for Human Caring, an international conference entitled “The Caring Imperative in Education.” It was at this conference that caring was introduced as a central philosophy of nursing education.

As the concept of caring in nursing developed, so did its impact on nursing education. Described as “a new pedagogy for nursing” the Caring Curriculum introduced by Bevis and Watson in 1989 provided an impetus for curricular change in nursing (Bevis & Watson, 2000). This curriculum revolution called for an altered perception of how nursing was taught and the role of the nursing instructor. The longstanding Tyler behaviorist perspective of education was challenged with a new philosophical model that would “keep pace with society’s changing demands and the natural evolution of nursing into a discipline and a profession” (Bevis, 1988, p.
According to Beck (2001), the revolution “called for enhancing caring practices by means of faculty-student and faculty-faculty relationships” (p. 101). As a result, students would learn caring through faculty modeling of caring behaviors and experiencing caring among their interactions with faculty and other students.

The significant impact of this culmination of work has promoted nursing organizations and leaders to adopt perspectives congruent with these foundational concepts of caring. The American Association of Colleges of Nursing (AACN) has identified caring as a vital or core concept in nursing practice and education (AACN, 1998). More recently, the National League for Nursing’s (NLN) mission has been guided by four core values including caring, integrity, diversity, and excellence. This organization defined caring as “promoting health, healing, and hope in response to the human condition” (National League for Nursing, 2007, para. 1).

Elaborating further the NLN noted the following:

A culture of caring, as a fundamental part of the nursing profession, characterizes our concern and consideration for the whole person, our commitment to the common good, and our outreach to those who are vulnerable. All organizational activities are managed in a participative and person-centered way, demonstrating an ability to understand the needs of others and a commitment to act always in the best interests of all stakeholders.

(National League for Nursing, 2007, para. 2)

Caring remains a central component of nursing education and practice throughout the world. Although the current focus of curriculum development has changed and is based on essentials (AACN, 2009), the caring curriculum revolution has made a significant and lasting imprint upon nursing education. As the focus of this concept continues to evolve, so does the manner in which nursing education is delivered.
Changes in nursing education delivery. As with many postsecondary disciplines, nursing education has advanced technologically in its delivery format. Historically moving from distance education that involved mailings, nursing courses now are offered online, often times asynchronously through a variety of mechanisms. Although many institutions continue to offer traditional classroom courses, the current trend in online education has engulfed the nursing discipline with a multitude of online programs now being offered for both undergraduate and graduate nursing degrees. Additionally, distance education offers institutions the ability to expand class and program offerings thereby increasing student enrollment. This delivery design allows students flexibility in degree attainment that they might not otherwise achieve. This is particularly evident among emerging graduate nursing students as their profile advances to a more non-traditional student role.

Bankert and Kozel (2005) noted that “as older adults return to formal education, they are typically highly motivated and committed to learn” (p. 227). This motivation and commitment to learning inherent in most non-traditional graduate students can only be further fostered by caring behaviors and practices perceived throughout their nursing programs. As a result of their learning styles and non-traditional roles, graduate students are seeking different ways of meeting their educational pursuits. These alternative delivery methods have allowed them to expand their level of experience in the nursing profession.

Student satisfaction and persistence in nursing. According to Noddings (1984), preserving and enhancing caring among students is the primary intent of nursing education. The principal mechanism for transference of caring behaviors from faculty to the student has been identified as modeling (Beck, 2001). The traditional onsite learning environment has provided the optimal opportunity for students to observe caring behaviors among faculty and co-learners.
However, utilization of a non-traditional distance learning environment has evoked new challenges in how to best role model behaviors that are perceived as caring.

Beck (2001) stated, “both personal and professional growth occurs as one experiences caring” (p. 108). Hence, as students perceive being cared for, their satisfaction with their educational experiences should enhance and promote their persistence throughout their program of study. However, modeling caring behaviors by faculty in a distance or a traditional learning environment has presented a challenge as how best to impact outcomes affecting both student satisfaction and persistence.

**Problem Statement**

Studies have addressed the perception of caring in both nursing practice and nursing education (Hanson, 1996; Kapborg & Bertero, 2003; Leners & Sitzman, 2006; Sitzman & Leners, 2006; Wade & Kasper, 2006). Research on the perception of caring has generally focused on patient and/or nurse perceptions in practice. Fewer studies, however, specifically attended to the issue in nursing education. Even fewer have addressed student perception of caring among different learning environments. Furthermore, most studies on caring in nursing have been qualitative studies with many researchers aiming to develop tools to effectively measure caring.

It is unclear from the nursing education literature if the modeling of caring behaviors can be transferred to students in a distance learning environment. Additionally, a gap in the literature exists describing the relationship between perceived caring with program satisfaction and persistence rates among graduate nursing students. This study revealed the researcher’s ardent interest in caring as a key concept in nursing and nursing education and how caring is impacted by the distance learning environment.
Purpose Statement

The purpose of this research study was to determine the impact of learning environment, program satisfaction, and persistence on students’ perceptions of faculty caring.

Research Question

1. What is the relationship between student program satisfaction and student persistence among the various learning environments of traditional, distance, and hybrid on student perception of faculty caring?

Professional Significance

As healthcare delivery continues to advance, so does the manner in which we educate nurses. Nursing education has slowly evolved over the past several decades to encompass the new technologically enhanced world, offering a variety of innovative learning techniques and delivery formats that go along with the times. As the number of distance education programs continues to grow, particularly among graduate students, and the trend away from the traditional classroom environment continues, it is imperative to determine how caring, identified as both a “core concept” and the “essence of nursing”, will be impacted. To meet societal needs for an expanding nursing population, it is vital to convey caring behaviors that translate into satisfied students completing their degree programs and emerging into the nursing workforce as both caring and competent professionals.

Definition of Relevant Terms

The following definitions are provided in order to better understand these terms as used in this research study.

Faculty caring: the act of showing concern and best interest for student well-being and success through dialoging, modeling, and affirming
Student persistence: the student’s intent to enroll next semester at same institution

Assumptions

1. Sample participants investigated represented the population.
2. Sample participants were honest in completing survey responses.

Delimitations

This study consisted of graduate nursing students enrolled either full-time or part-time in accredited institutions throughout the Midwestern region of the United States. Students surveyed were enrolled in either a distance education program, a traditional classroom program, or a hybrid program.

Summary

In summary, this research study examined faculty caring as it is modeled in the distance and traditional learning environments. The impact on student satisfaction and persistence was also studied in order to assist nurse educators in fostering caring behaviors in the technologically current and emerging field of nursing education and practice. Chapter 2 provides a review of the theoretical and empirical literature surrounding the concept of caring. In addition, distance education technology, and student satisfaction and persistence in nursing education are discussed.
Review of Literature

Defining Caring

Although studied extensively over the past several decades, the definition of caring as a concept has remained elusive. Commonly described in standard terms, dictionary definitions of caring identify it as both an adjective and as a noun. Coates (2002) noted that caring “is difficult to operationally define, is multifaceted, and encompasses complexities of human interaction” (p. 216). Furthermore, Leininger (1981) recognized that “care, caring, and nursing care are often used interchangeably” (p. 6). As a result of the ambiguity surrounding caring, nursing and non-nursing theorists have attempted to develop a theoretical description of this phenomenon. For example, Morse, Solberg, Neander, Bottorff, and Johnson (1990) reviewed 35 different author perspectives and definitions of caring. As a result, five categories of caring emerged which included “caring as a human trait, caring as a moral imperative or ideal, caring as an affect, caring as an interpersonal relationship, and caring as a therapeutic intervention” (Morse et al., 1990, p. 3). In addition, McCance, McKenna, and Boore (1997) utilized Walker and Avant’s (1995) process of content analysis in order to elucidate the meaning of caring. This method utilized a variety of steps in order to draw specific and relevant conclusions regarding a particular concept. In doing so, the authors identified four common aspects of caring in nursing including serious attention, concern, providing for, and getting to know the patient. Amount of
time, respect for persons and an intention to care were noted as antecedents of caring (McCance et al., 1997). Scotto (2003) concluded that a new view of caring was necessary that incorporates the intellectual, the psychological, the spiritual, and the physical aspects. Defining caring as “offering of self,” Scotto reasoned that all aspects must be present in the nurse and continuously evaluated (p. 290). Literature has shown that caring is an operationally indefinable phenomenon. Yet however unclear the notion is, it is universally agreed that caring is a central and vital component of nursing practice and nursing education.

Defining caring and how it is implemented in nursing education has also illuminated a sense of uncertainty. According to Paterson and Crawford (1994), “the assumption seems to be that caring in nursing practice is merely transferred as an analogous concept to the arena of nursing education” (p. 165). Thus, the nurse-patient relationship of caring is synonymous with the student-teacher relationship in nursing education (Paterson & Crawford, 1994). The student-teacher relationship has therefore been the focus of much of the caring literature in nursing education. This relationship has been viewed as reciprocal, thereby transferable from the educational setting to the practice setting. Cohen (1993), in her work exploring caring pedagogy of the student-teacher relationship, stated, “teaching a caring ideology includes living caring experiences between students and faculty within nursing education” (p. 622). Through further exploration, the meaning of caring in nursing education can help enlighten the creation of effective caring learning environments.

**Teaching Caring**

As nursing scholars continue to struggle with how to adequately define the phenomenon of caring, the question of can caring be taught and how can it be taught has also been proposed. According to Komorita, Doehring, and Hirchert (1991), “to teach caring, the identification of the
necessary caring behaviors is needed” (p. 23). The purpose of their study was to identify those behaviors nurses considered important in making a patient feel cared for. Additionally, their study included several variables to determine their impact including nurses’ age, years of experience, functional area, and clinical specialty. The researchers found no significant difference among type of educational institution or functional area for the top ten most important caring behaviors identified by the nurses studied. However, findings did show that older nurses with more experience compared similarly to patient perceptions indicating a need for further research on the impact of age and experience on the perception of caring.

The full appreciation of caring within colleges of nursing must be congruent with the mission and philosophy of the nursing program. Caring in the academic arena was explored by Forsyth, Delaney, Maloney, Kubesh, and Story (1989). They described the implementation of a caring curriculum at Luther College. Through efforts of the entire faculty, caring concepts and essential caring behaviors were identified and threaded throughout each level of the curriculum. The effectiveness of the caring curriculum at Luther College was evaluated and both alumni and employers found that the graduates did exhibit caring behaviors. As with the case of Luther College, Tanner (1990) sufficed that “caring is learned by experiencing caring practices between faculty and students, and that is only possible when the culture of the school supports enactment of caring practices among faculty” (p. 71).

Simonson (1996) utilized phenomenology to study how caring was taught in an associate degree nursing education program. Using semi-structured interviews, observations, and documentation review, Simonson sought to better understand the meaning of caring for both faculty and students, how caring was communicated to students and how this meaning impacted the students’ experiences. Based on Watson’s 10 carative factors, four major themes emerged
from the data more frequently than the other six. These included “formation of a humanistic-altruistic system of values”, “cultivation of sensitivity to one’s self and to others”, “promotion of interpersonal teaching-learning”, and “provision for a supportive, protective, and (or) corrective mental, physical, sociocultural, and spiritual environment” (Watson, 1979, pp. 9-10). Simonson identified the carative factors both faculty and students deemed important concluding that in order to teach caring one must live caring.

Perhaps the most significant way for faculty and students to live caring is through interaction. Cohen (1993) noted, “caring in education highlights the student-teacher relationship as affirming, interconnected and related, mutual, reciprocal and responsible” (p. 623). Although this may not be a part of the direct legitimate curriculum, Tanner (1990) acknowledged that the hidden curriculum plays a major role in determining what the student learns. Additionally, she proposed a new relationship between faculty and students incorporating mutual respect and egalitarianism based on faculty development not curriculum development (Tanner, 1990). This new relationship was formulated on the premise that one learns from their environment. Positive and/or negative interactions can be essential in determining the perception of caring or even non-caring behaviors in the faculty-student relationship.

Further research on the teaching of caring has shown that role modeling of caring behaviors by faculty is highly influential (Beck, 2001; Kelly, 1992; Nelms, Jones, & Gray, 1993). Utilizing grounded theory, Kelly (1992) interviewed 23 senior baccalaureate students in order to determine what they perceived as most influential in the development of their nursing self-concept. The students perceived the most dominant caring role models as nursing faculty, nursing clinical preceptors, and family or friends. According to Kelly, “the qualities of those considered to be a major influence were: being supportive, taking pride in the work, taking the
time to do a good job, listening, having a good sense of humor, and being involved with patients” (p. 123). Additionally, Nelms et al. (1993) found that students do indeed learn about caring through role modeling of faculty behaviors in both the classroom and clinical settings, and through other nursing encounters as well. Furthermore, the researchers found that non-caring behaviors also influenced students’ perception of caring. This was particularly evident in the exploration of the student-staff relationship as many students reported non-caring experiences between nursing staff and patients. Non-caring behaviors were also noted in the student-educational program relationship and were primarily related to lack of understanding regarding financial burdens and meeting faculty expectations. However, most important perhaps is the notion that students expect to learn caring through faculty role modeling (Nelms et al., 1993). Therefore, faculty must be aware of the caring and non-caring behaviors they exhibit in order to meet student expectations and foster effective caring learning communities. The complexity of how to teach caring is further challenged by the lack of consensus on how best to measure this developing concept.

**Measuring Caring**

Not only is caring difficult to define, but it is also difficult to measure. Most studies of the caring concept have utilized qualitative methodologies such as phenomenology due to the complex nature of the subject. However, these types of measures, although appropriate in use, have been scrutinized for their lack of generalizability and limitations. As the discussion of caring as both an art and science of nursing continued, Valentine (1991) argued, “it must also advance the empirical measurement of caring in a way that withstands the scrutiny of the scientific community” (p. 100). Echoing Valentine’s argument, Swanson (1999) noted that in order to promote caring knowledge, qualitative findings must be transformed into empirical
measures utilizing quantitative methodologies. As a result, several tools now exist that measure various aspects of caring.

In her book *Assessing and Measuring Caring in Nursing and Health Science*, Watson (2002) acknowledged the need for quantitative methodologies in order to promote the science of caring. However, she also noted that “some deep philosophical/ontological dimensions of caring cannot be measured” (Watson, 2002, p. 6). Watson continued by presenting an overview of the major tools on caring developed and reported in the nursing literature from the past several decades. The synopsis of each tool included the year developed, author and contact information, year of publication, what the tool measured, description of the tool, reported validity and reliability, as well as citations of tool usage in the nursing literature. The tools presented measured various aspects of caring including perceptions of nurse caring behaviors by both nurses and patients, identification of nurse caring behaviors, evaluation of nurse caring behaviors, nurse educators’ perceptions of caring behaviors, students’ perception of caring, and organizational climate of caring, to name a few. Watson recognized “by having instruments to address caring, there are more possibilities for developing knowledge of caring, and learning more about how patients, nurses, and systems may benefit” (p. 5).

In summary, the ability to define, teach, and measure caring has been researched extensively since the call for a curricular change or paradigm shift in nursing education first occurred. However ambiguous the term caring is, the need for theoretical underpinnings to guide the practice and promotion of a caring science has been accepted throughout the nursing community. This research study utilized Watson’s Theory of Caring as a theoretical guide. An overview of this theory is presented as well as some of the other major caring theories relevant to
nursing education. In addition, the literature review will discuss the perception of caring, learning environments, as well as student satisfaction and persistence.

**Watson’s Theory of Caring**

Although first proposed in 1979, Dr. Jean Watson’s Theory of Caring has continued to influence nursing practice as well as nursing education worldwide for the past several decades. In her first publication entitled *Nursing: The Philosophy and Science of Caring*, Watson (1979) introduced what she termed the ten carative factors in nursing to serve as the foundation and guide to her theory. Those carative factors are:

1. The formation of a humanistic-altruistic system of values
2. The instillation of faith-hope
3. The cultivation of sensitivity to one’s self and to others
4. The development of a helping-trust relationship
5. The promotion and acceptance of the expression of positive and negative feelings
6. The systematic use of the scientific problem-solving method for decision making
7. The promotion of interpersonal teaching-learning
8. The provision for a supportive, protective, and (or) corrective mental, physical, sociocultural, and spiritual environment
9. Assistance with the gratification of human needs
10. The allowance for existential-phenomenological forces. (p. 9-10)

In contrast to the curative factors studied by medicine, the carative factors “aim at the caring process that helps the person attain (or maintain) health or die a peaceful death” (Watson, 1979, p. 7). Watson’s theory of caring emphasized both humanistic and scientific values and knowledge in order to formulate the science of caring. Created as a result of her own educational
background and beliefs, her original work on the science of caring was based on the following seven assumptions:

1. Caring can be effectively demonstrated and practiced only interpersonally.

2. Caring consists of carative factors that result in the satisfaction of certain human needs.

3. Effective caring promoted health and individual or family growth.

4. Caring responses accept a person not only as he or she is now but as what he or she may become.

5. A caring environment is one that offers the development of potential while allowing the person to choose the best action for himself or herself at a given point in time.

6. Caring is more “healthogenic” than is curing. The practice of caring integrates biophysical knowledge with knowledge of human behavior to generate or promote health and to provide ministrations to those who are ill. A science of caring is therefore complementary to the science of curing.

7. The practice of caring is central to nursing. (pp. 8-9)

Watson’s theory of caring has continued to evolve since its first inception. In 1985 she published *Nursing: Human Science and Human Care: A Theory of Nursing*. Expanding on her original work, Watson (1988) noted that “the goal of nursing proposed is to help persons gain a higher degree of harmony within the mind, body, and soul which generates self-knowledge, self-reverence, self-healing, and self-care processes while allowing increasing diversity” (p. 49).

Based on humanism and moral ideals, Watson’s theory incorporated the 10 carative factors as a foundation for the practice of a science of human caring. Furthermore, Watson described both an event and an actual caring occasion. An event occurs when two people such as a nurse and
patient come together in a “human care transaction” (Watson, 1988, p 58). Whereas, Watson described an actual caring occasion as one in which deeper meaning is achieved in order to promote self-actualization creating a transpersonal caring experience.

The transpersonal caring relationship described by Watson (1988) “connotes a special kind of human care relationship—a union with another person—high regard for the whole person and their being-in-the-world” (p. 63). The nurse should see the patient as an entire being which includes body, mind, and spirit or soul in order to connect on a higher level promoting the healing process. Both nurse and patient feel the interconnectedness of the relationship. It is based on a deeper understanding of the subjective feelings and inner being of both self and another which “can occur through actions, words, behaviors, cognition, body language, feelings, thought, senses, intuition, and so on” (Watson, 1988, p. 64). As a result, the nurse as well as the patient experiences one another through transpersonal human caring.

As her research and personal experiences have grown, Watson’s theory of caring has continued to evolve and incorporate other humanistic fields of study. In an interview conducted by Fawcett (2002), Watson discussed how her theory has advanced the nursing discipline, her current thoughts on nursing and her theory of human caring. Watson stated that “the theory is about a different way of being human, a different way of being present, attentive, conscious, and intentional as the nurse works with another person” (Fawcett, 2002, p. 215). She noted that she feels her theory is transdisciplinary incorporating all aspects of healthcare delivery not just nursing. She concluded the interview by acknowledging her ongoing efforts and realizations, and how her own life experiences have largely impacted her deeper meaning of human caring and caring science.
Her most current adaptation of her original work involves the transformation of the original ten carative factors to what she has termed clinical caritas processes (Watson, 2007). Table 1 shows the evolution from carative factors to clinical caritas processes. According to Watson (2007), “caritas comes from the Latin word meaning to cherish, to appreciate, to give special attention, if not loving, attention to; it connotes something that is very fine, that indeed is precious” (“Clinical Caritas and Cartias Processes”, para. 1). The new postmodern paradigm she has proposed incorporates both caring and love as a spiritual merger utilized in a transpersonal caring relationship. Glasgow and Morris (2005) concluded:

It is when we include caring and love in our work and our life that we discover and affirm that nursing, like teaching, is more than just a job, but a life-giving and life-receiving career for a lifetime of growth and learning. (p. 308)

Watson continues to redefine and promote her theory through a variety of means including the Watson Caring Science Institute and the International Caritas Consortium. Watson’s work has had a significant impact on both nursing practice and education. Contributing to the call for a curriculum revolution and paradigm shift in nursing education away from the behaviorist perspective, in 1989 Watson along with Bevis published Toward a Caring Curriculum: A New Pedagogy for Nursing. Providing a framework for curricular reform, this collaborative effort instilled a new energy for nurse educators to refocus their curricula based on the NLN mandate for change. This mandate emphasized a “renewed emphasis of nursing’s essential role, mission, commitment and function of human caring and a return to the human aspect of nursing and a moral-based educational perspective in our individual settings” (Bevis & Watson, 1989, p. 39). Applying her human caring theory to education, Watson proposed that such an approach requires “personal, social, moral, scientific, and spiritual engagement of the
Table 1

*Watson's Ten Carative Factors and Ten Caritas Processes*

<table>
<thead>
<tr>
<th>Carative Factors</th>
<th>Caritas Processes</th>
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</thead>
<tbody>
<tr>
<td>1. The formation of a humanistic-altruistic system of values</td>
<td>1. Practice of loving-kindness and equanimity within context of caring consciousness</td>
</tr>
<tr>
<td>2. The instillation of faith-hope</td>
<td>2. Being authentically present, and enabling and sustaining the deep belief system and subjective life world of self and one-being-cared-for</td>
</tr>
<tr>
<td>3. The cultivation of sensitivity to one's self and to others</td>
<td>3. Cultivation of one's own spiritual practices and transpersonal self, going beyond ego self</td>
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<tr>
<td>4. The development of a helping-trusting relationship</td>
<td>4. Developing and sustaining a helping-trusting, authentic caring relationship</td>
</tr>
<tr>
<td>5. The promotion and acceptance of the expression of positive and negative feelings</td>
<td>5. Being present to, and supportive of, the expression of positive and negative feelings as a connection with deeper spirit of self and the one-being-care-for</td>
</tr>
<tr>
<td>6. The systematic use of the scientific problem-solving method for decision making</td>
<td>6. Creative use of self and all ways of knowing as part of the caring process; to engage in artistry of caring-healing practices</td>
</tr>
<tr>
<td>7. The promotion of interpersonal teaching-learning</td>
<td>7. Engaging in genuine teaching-learning experience that attends to unity of being and meaning, attempting to stay within other's frame of reference</td>
</tr>
<tr>
<td>8. The provision for a supportive, protective, and/or corrective mental, physical, sociocultural, and spiritual environment</td>
<td>8. Creating healing environment at all levels, physical as well as non-physical, subtle environment of energy and consciousness, whereby wholeness, beauty, comfort, dignity, and peace are potentiated</td>
</tr>
<tr>
<td>9. Assistance with the gratification of human needs</td>
<td>9. Assisting with basic needs, with an intentional caring consciousness, administering 'human care essentials', which potentiate alignment of mind-body-spirit, wholeness, and unity of being in all aspects of care</td>
</tr>
<tr>
<td>10. Allowance for existential-phenomenological dimensions</td>
<td>10. Opening and attending to spiritual-mysterious and existential dimensions of one's own life-death; soul care for self and the one-being-care-for</td>
</tr>
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</table>
nurse educator and a commitment to self and other” (Bevis & Watson, 1989, p. 42). As a result, Watson along with other nursing scholars engaged the nursing education community in an indisputable need for a new nursing pedagogy free from the behaviorist model engrained in them.

In addition to Watson, several other theorists including Boykin and Schoenhofer, and Noddings have helped shape the concept of caring in nursing education. Contributions of these theorists will be described. It should be noted, however, that this is not an exhaustive list of contributors on caring, but rather a summary of the major theoretical perspectives on caring.

Other Theories on Caring

Boykin & Schoenhofer’s Theory of Nursing as Caring. In their book *Nursing as Caring: A Model for Transforming Practice*, Boykin and Schoenhofer (2001) presented their work on caring as the foundation of nursing. Influenced by Mayeroff (1971) and Roach (1984), they developed their theory while implementing a caring curriculum at Florida Atlantic University. The basic premise of their theory is that “all persons are caring” (Boykin & Schoenhofer, 2001, p. 1). In contrast to Watson (1989) who believed that a caring attitude is not a genetic trait, Boykin and Schoenhofer proposed that simply being human means living caring. However, the potential to express caring occurs from moment to moment over the course of one’s lifetime. The following assumptions underlie their theory of Nursing as Caring:

- Persons are caring by virtue of their humanness
- Persons are caring, moment to moment
- Persons are whole or complete in the moment
- Personhood is a process of living grounded in caring
Personhood is enhanced through participating in nurturing relationships with caring others. Nursing is both a discipline and a profession. (p. 1)

It is through life experiences that we as individuals grow to know ourselves as caring individuals. According to Boykin and Schoenhofer, “as we learn to live fully each of these experiences, it becomes easier to allow self and others the space and time to develop innate caring capabilities and authentic being” (p. 3).

A key concept in Nursing as Caring is the “nursing situation” defined by Boykin and Schoenhofer (2001) as “a shared lived experience in which the caring between nurse and nursed enhances personhood” (p. 13). This lived experience is what helps develop the knowledge of nursing. The unique ability of nurses to express caring lies in their definition of caring in nursing as:

the intentional and authentic presence of the nurse with another who is recognized as a person living caring and growing in caring. Here, the nurse endeavors to come to know the other as caring person and seeks to understand how that person might be supported, sustained, and strengthened in his or her unique process of living caring and growing in caring. (p. 13)

As a result of the nursing situation, each individual is interrelated and grows in caring.

Boykin and Schoenhofer (2001) discussed the implications of their theory on nursing education. They stated,

the curriculum, the foundation of the education program, asserts the focus and domain of nursing as nurturing persons living caring and growing in caring. All activities of the program of study are directed toward developing, organizing, and communicating nursing
knowledge, that is, knowledge of nurturing persons living caring and growing in caring.  
(Boykin & Schoenhofer, 2001, p. 41)

They utilized the analogy of a dancing circle where dancers or members include administration, faculty, students, staff, the community, as well as patients. Each dancer has their own unique role in providing support and understanding of nursing as a discipline and how to live caring within the curriculum. It is imperative that all involved create and foster a caring environment that “furthers the development of the students’ capacity to care” (Boykin & Schoenhofer, 2001, p. 49).

**Noddings.** Other fields of study have also contributed to the evolution of the caring concept. The contributions of Nel Noddings (1984) have reiterated the importance of caring in nursing education and practice. Grounded in ethics and moral behavior, Noddings’ approach emphasized the feminine view as it is “rooted in receptivity, relatedness, and responsiveness” (p. 2). She focused on two types of caring including ethical caring and natural caring. Ethical caring she described as “the relation in which we do meet the other morally” and natural caring as “that relation in which we respond as one-caring out of love or natural inclinations” (p. 4-5). Describing caring as reciprocal, Noddings asserted that caring occurs between the one-caring and the cared-for. According to Noddings, “when we care, we consider the other’s point of view, his objective needs, and what he expects of us” (p. 24). Therefore, the one-caring does not consider what the benefit of caring is to himself but what the benefit holds for the cared-for.

Noddings (1984) recognized the need for moral education in the sense that those planning and conducting education will strive to meet all those involved morally; and it refers to an education that will enhance the ethical ideal of those being educated so that they will continue to meet others morally. (p. 171)
As such, the teacher acts as the one-caring and the student the cared-for. Additionally, Noddings asserted “through dialogue, modeling, the provision of practice, and the attribution of best motive, the one-caring as teacher nurtures the ethical ideal” (p. 179). Providing practical applications for how to organize schools for caring, her work can be applied directly to nursing education and practice. Caring, whether natural or ethical, serves as a dominant force for nursing, and it must be cultivated in nursing education programs in order to foster the ethical ideal.

In summary, these theoretical perspectives have helped shape the caring concept in nursing practice and nursing education. Serving as guides to study caring in a variety of contexts, the contributions made by each theorist have significantly impacted the nursing literature and have expanded the nursing knowledge base allowing for theoretical underpinnings for empirical research studies. Applying these theories to practice, nurse educators can further explore the impact of caring as a vital concept.

Perceptions of Caring

Studies on faculty-student interactions with particular attention to the perceptions of caring by both students and faculty are presented. These studies reflect past and current research on the phenomenon of caring as it applies to nurse education. Qualitative and quantitative methodologies have been utilized, as previously mentioned to further explore this concept. First, studies using qualitative design methods are presented as these make up the majority of research in this area followed by studies using quantitative methodologies.

Qualitative studies. In her study describing the meaning of human care and caring experiences, Appleton (1990) utilized phenomenology in her interview of two doctoral nursing students. Appleton incorporated the technique of talk-turning in order to further elaborate what
was heard in the interviews. Validity and reliability were determined by the author using four criteria by Lincoln and Guba (1985) which included truth value, applicability, consistency, and neutrality. She noted that these criteria are appropriate when incorporating phenomenological methodologies.

As a result of her analysis and “structured reflection” (p. 85), Appleton (1990) discovered themes about the expressions of caring and the process of caring. The expressions of caring themes were treating, understanding, helping and letting, while the process of caring themes were commitment, involvement, and belonging. Quotations lent support to the derived themes. Even though there were only two students in the study, findings were similar to other studies suggesting that relationships formed with faculty and other students focused on caring, instilled a sense of self-growth and becoming (Appleton, 1990). Furthermore, she concluded that experiencing caring in one’s educational environment precedes the exploration of caring in one’s professional life.

Halldorsdottir (1990) studied nine former BSN students in Iceland regarding their caring and uncaring encounters with past teachers. Again, this author used the phenomenological perspective to guide the unstructured interview process. Based on student perspectives, professional competence, genuine concern for the student as a studying person, positive personality, and professional commitment were identified as aspects of the professional caring teacher (Halldorsdottir, 1990). This approach led to a trusting mutual relationship or caring student-teacher encounter formulated by “developing a professional working relationship and keeping a respectful distance” (p. 99). Similar to findings by Appleton (1990), Halldorsdottir uncovered four themes from the caring encounters including sense of acceptance and self-worth,
personal and professional growth and motivation, appreciation and role-modeling, and long-term 
gratitude and respect.

Unlike other researchers, Halldorsdottir (1990) also explored student perspectives of 
uncaring instructor behaviors. Contrasted to the caring teacher approach, students identified 
uncaring aspects as lack of professional competence, lack of concern, demand for control and 
power, and destructive behavior. These thereby led to lack of trust and a detached teacher-
student relationship. Although no specific quotations were provided to support the findings, 
specific examples were reported to substantiate the conclusions. Halldorsdottir summarized 
findings by recommending further research on student perspectives of caring and uncaring in the 
educational context.

In their phenomenological study of both student and teacher perspectives of caring 
interactions, Miller, Haber, and Byrne (1990) interviewed six senior nursing students and six 
nursing faculty who had taught at least three years. The three researchers were randomly 
assigned to conduct open-ended interviews following a specific guide “for encouraging the 
informant to explore thoughts on a caring interaction” (p. 127). Findings from the interviews 
were analyzed utilizing techniques by Colaizzi (1978), Giorgi (1985), and Valle and King 
(1978). Interestingly, although themes of caring emerged after only three interviews with both 
students and faculty, the researchers continued with an additional three interviews to be certain 
completion of interviews had not occurred to soon. Each researcher reviewed the transcribed 
interviews while listening to the recording individually to ensure accuracy of transcriptions 
which resulted in one transcription being eliminated from the study. After rereading the 
transcriptions, each researcher then identified caring statements. They then merged their
findings to identify all caring themes and verified with the study participants the accuracy of their conclusions.

The four themes that emerged were congruent for both faculty and students and included: holistic concern or philosophy, teacher ways of being, mutual simultaneous dimensions, and student ways of being (Miller et al., 1990). Students perceived a caring interaction as one in which support is provided by the teacher. In addition, faculty concern for student well-being both academically and personally was identified by students. Similar to other findings, the researchers found that by experiencing a caring learning environment, the student actually experiences “increased self-worth, self-esteem, and self-confidence” (p. 129). Contrasted to other studies that simply addressed student perceptions, this study also consulted faculty on their perceptions of caring interactions in the educational setting. Teachers expressed that faculty role modeling engaged students in caring interactions with patients. Similarly, they perceived availability and support as important components to the caring interaction.

For all of these studies (Appleton, 1990; Halldorsdottir, 1990; Miller et al., 1990) the authors cited various contributions their findings made to the knowledge of caring specific to the educational setting, however they did not address the importance of the concept and how to implement it into the curriculum per se. Furthermore, it was unclear how much prior knowledge the participants had on caring as a concept in nursing and if caring was an essential element in the participating institutions’ curriculum.

Contrary to other investigators, Chipman (1991) in her study of 26 second-year diploma students sought to identify student perceptions of the meaning and value of caring in order to implement a curriculum revision based on Watson’s Theory of Caring. Her study, however, asked participants to identify incidents in nursing practice, not nursing education, viewed as
caring and noncaring. Interviews were conducted individually and content was analyzed by constant comparative method in order for themes to emerge. The investigator found it interesting that none of the students reported any technical aspects of nursing as caring, but rather all were humanistic in nature and included giving of self, meeting patients’ needs in a timely fashion, and providing comfort measures for patients and their families (Chipman, 1991). Several responses were provided to support these themes. Noncaring behaviors were identified as direct opposites to caring behaviors. Additional quotations were provided as support. Chipman concluded by offering suggestions on incorporating these humanistic aspects deemed relevant throughout a caring curriculum in addition to the technical aspects in order to create a true sense of self for students.

In 1991 Beck studied 47 junior and senior nursing students at a southeastern United States university that had a caring based curriculum. As with previous studies, students were asked to describe a particular situation with a faculty member that they felt was caring in nature. Information on thoughts, perception, and feelings regarding the encounter were recorded. Phenomenology was again the chosen method in order to gain insight into lived experiences of the students. Utilizing Colaizzi’s (1978) method which was outlined, Beck uncovered numerous significant statements which led to formulated meanings. These formulated meanings were categorized into three themes: attentive presence, sharing of selves, and consequences. Finally, using all the data, the researcher created an overall description of a caring nursing student-teacher encounter and validated this portrayal with the student participants. Beck found her results to strongly correlate with what Roach (1984) identified as the five characteristics or C’s of caring. These are compassion, competence, confidence, conscience, and commitment. Beck noted that “students need to have a sense of being cared for to nurture their abilities to care for
others” (p. 21). Therefore, she recommended faculty incorporate these findings in order to effectively role-model caring behaviors.

Dillon and Stines (1996) replicated Beck’s (1991) study in a different population. Working with an even larger sample size, Dillon and Stines elicited written responses from 49 LPN students and 32 nurses’ aide students. Important to note, however, was that the institutions studied were not identified as having a caring curriculum as in Beck’s study. As with Beck’s research, the investigators identified significant statements from which they derived formulated meanings. Additionally, a comprehensive description of a caring faculty-student interaction was provided. The theme clusters that emerged for this population were similar to previous findings by Beck and included sharing and giving of self, respecting the student as a unique individual, and role-modeling. However, one difference noted by the researchers was the long-term effects of the encounter as previously identified in Beck’s baccalaureate nursing student sample. Dillon and Stines attributed this to the short nature of the LPN and nurses’ aide programs these students were enrolled in. In addition, the sample studied reported more frequently than in the previous Beck study what the author’s termed “positive negatives,” but they were unable to explain this difference. Limitations of the study identified were related to sampling technique as well as written requirements. These investigators recommended strengthening validity with quantitative methodologies.

As the impact of the caring movement was in full force, Hanson and Smith (1996) discovered the need for further research to support this effort. The investigators interviewed 17 baccalaureate nursing students at a private liberal arts college and 15 baccalaureate nursing students at a small public state institution. Again, phenomenological method of analysis, specifically using Giorgi’s (1985) technique, was used to describe student perspectives of both
caring and uncaring interactions with faculty. Researchers interpreted the data individually first, then in aggregate in order to clarify findings and determine any bias on the part of the researchers. Initially, the investigators planned to compare data from the two settings. However, aside from some demographic differences, responses were similar. Therefore, data were combined from both institutions. The themes that emerged based on student statements were placed in three categories including recognition, connection, and confirmation/affirmation. As previously noted in other studies, Hanson and Smith formulated a general description of a caring student-teacher encounter based on student responses. However, they also provided an overall account of a not-so-caring student-teacher encounter. They concluded that “providing a caring environment not only serves a humanistic purpose of enhancing students’ positive feelings and self-esteem, but also relates to increasing motivation to study and learn and affirming students’ choice of nursing as a profession” (p. 111).

In 1994, Frank provided a comprehensive overview of the works on the caring curriculum to date, including research on student-faculty interactions and curricular issues. More recently, Beck (2001) conducted a metasynthesis of qualitative studies on caring in nursing education. As previously noted, qualitative studies made up the majority of research conducted on the caring phenomenon up to that point in time. Beck questioned the contributions these studies had made in discovering the impact of caring in nursing schools and how they can further promote the caring environment into the following century. Using Noblit and Hare’s (1988) meta-ethnographic technique, Beck identified 14 qualitative studies on caring specific to nursing education. Two studies related to caring among faculty (Beck 1994; Grigsby & Megel, 1995); six examined caring amid nursing students and faculty (Appleton, 1990; Beck, 1991; Grams, Kosowski, & Wilson, 1997; Halldorsdottir, 1990; Hanson & Smith, 1996; Miller et al, 1990);
two addressed caring among students (Beck, 1992a; Hughes, 1993); and four investigated caring between students and their patients (Beck, 1992b; Beck, 1993; Kosowski, 1995; Wilkes & Wallis, 1993).

Regardless of the study’s focus, results of the meta-synthesis revealed four metaphors of caring which pervaded nursing education including presencing, sharing, supporting, competence, and uplifting effects (Beck, 2001). These themes, according to Beck, serve as the basis for creating a caring learning community. Beck concluded that it is imperative that a caring environment utilizing these metaphors be fostered in order to promote caring as an essential element of nursing. Furthermore, she noted that “the data suggest a trickling down effect starting with faculty caring for each other, then moving on to faculty caring for students, students caring for each other, and finally students caring for their patients” (Beck, 2001, p. 108).

As nursing education has evolved into offering distance education programs, the question of how to foster caring in this new environment has been raised. Acknowledging the gap in previous studies on caring, in 2006, Sitzman and Leners explored this new arena in their qualitative study of 11 baccalaureate nursing students. Participants were enrolled in distance courses and had completed one full-time semester of online study prior to completing the questionnaire. Students were asked to respond to six open-ended questions via email. The questions asked by the investigators sought to discover factors that support and do not support caring experiences in the online environment, as well as how the student defined a caring teacher-student relationship. Furthermore, they asked if the presence or absence of caring in this environment impacted their success and elicited guidance from the participants for instructors who wish to implement caring in their online courses (Sitzman & Leners, 2006).
After reducing and coding the data, eight themes emerged and were validated by the participants. Results paralleled those from previous traditional face-to-face studies on caring as well as best practices in online education. The themes included frequent feedback, timeliness, caring online is reciprocal, personal connection and empathy, clarity, multiple contact opportunities, commitment to learning, and second-fiddle worries (Sitzman & Leners, 2006). Specific quotations were provided to support this analysis. According to Sitzman and Leners (2006), “the results of the current study suggest that engaging in best practices for nursing and online education may be one effective way to convey caring to online nursing students” (p. 258). Therefore, nursing faculty should be aware of the recognized best practices in online education in order to model and promote effective caring behaviors.

Replicating the previous study later that same year, Leners and Sitzman (2006) studied graduate student perceptions of caring in the online environment. Forty-nine graduate nursing students enrolled in either entirely online or in hybrid courses were assessed utilizing the same six questions as were previously addressed by baccalaureate nursing students. Thirty-nine students responded to the online survey. No specific mechanism of data analysis was identified however it can be assumed that the methods used in the prior study were also incorporated in this study. The six themes that were identified from the data included: empathetic perspective, timeliness of communication, tone of appreciation, being the best I can be, finding a chord of harmony, and feeling the passion of caring online (Leners & Sitzman, 2006).

Furthermore, the researchers recognized “feeling the passion of caring online” as an overarching premise incorporating aspects of the other themes. Regardless of learning environment, students expressed that they felt cared for by those faculty that exhibited affective actions. In summary, the researchers found their results to be similar to previous studies of
caring and best practices in online education and “were struck by the extent to which respondents sought, experienced, and appreciated faculty actions, affect, and intuitive behavior that reflected caring, albeit from a distance” (Leners & Sitzman, 2006, p. 318). Further research was suggested on caring and motivational factors leading to student success. In addition, the researchers discussed the need to separate those students that do not self-select distance courses from those that willingly choose these types of programs as this factor may influence data. The most significant recommendation further verifying the gap in literature concluded from this study was a direct influencing factor for the current proposed research agenda. According to Leners and Sitzman (2006), “continued exploration of caring within online teaching environments is necessary to discover similarities and differences in caring as conveyed in online versus face-to-face classrooms” (p. 318). Further examination of this issue is important in promoting quality online nursing education programs.

Although there has been a recent trend towards tool development and strong suggestions from critics to use quantitative methods, there remain few quantitative studies in the literature on perceived caring as compared to qualitative. Most studies addressing caring within the nurse-patient relationship resulted in findings that demonstrated nurses perceive important caring behavior differently from patient perceived importance. Unfortunately, fewer quantitative studies address the perceptions of caring among nursing students and/or faculty.

**Quantitative studies.** In 1991, Mangold found that senior nursing students and practicing nurses had similar perceptions of important caring behaviors. Using the 50-item Caring Assessment Instrument (CARE-Q), Mangold surveyed 30 senior nursing students from one academic setting and 30 professional nurses with at least one year of experience. The CARE-Q consisted of six subscales which included: accessible, explains and facilitates,
comforts, anticipates, trusting relationship, and monitors and follows through. Participants were asked to sort 50 CARE-Q cards into 7 packets arranged from most important to not important. Results showed no statistical difference between the nurses’ and students’ perceptions of caring behaviors. However, the trusting relationship subscale was almost significant (p< .06) noting that practicing nurses ranked this higher than the student nurses. The researcher explained that the large number of items in this subscale may have attributed to this result as well as the differences in age noted between the two groups. Findings indicated that the two groups were in agreement on the most important behavior as “listens to the patient.” Furthermore, interestingly both identified “is professional in appearance” as one of the least important behaviors with the student nurses also identifying three additional behaviors as equally unimportant including “puts the patient first no matter what,” “volunteers to do little things,” and “suggests questions to ask the doctor.” Mangold indicated the need for further research among nursing students from a variety of academic settings to increase generalizability of findings. In addition, she recommended that future studies be conducted comparing students entering the nursing curriculum with those completing their program of study and throughout their program of study to determine particular academic influences.

Similarly, Komorita, Doehring, and Hirchert (1991) studied the perceptions of caring of faculty and other nurses with advanced education. They also used the CARE-Q to compare the two groups. There was no difference indicated among these groups, therefore the researchers combined the data for further analysis. The researchers compared their data with the previous study by Larson (1984) on patient perceptions of caring behaviors. Results replicated previous study findings indicating that both nurse educators’ and advance educated nurses’ perceptions of caring behaviors differ from that of patients’ indicating a need for further research. Although the
aforementioned studies were conducted within the clinical practice arena, further studies addressed caring specifically to the nursing educational environment.

In a continued effort to operationalize and empirically measure the concept of caring, Wade and Kasper (2006) utilized Watson’s Theory of Transpersonal Caring as a guide to develop a tool to measure nursing students’ perceptions of faculty caring. They identified two other existing instruments, Golden’s (1993) Perceptions of Instructor Caring Behaviors Scale and Duffy’s (2002) Caring Assessment Tool (educational version). Limitations of both instruments facilitated the need for an additional tool that specifically utilized theory for item development. Development of the Nursing Students’ Perceptions of Instructor Caring (NSPIC) instrument consisted of two phases: developing the instrument and field-testing the instrument. Working closely with Dr. Jean Watson, the researchers defined and developed the concept of nursing students’ perceptions of instructor caring. Using Watson’s 10 carative factors as a guide, Wade and Kasper developed each item for the questionnaire. Preliminary item testing was done on 20 senior nursing students and revealed a high Cronbach’s alpha coefficient (\(\alpha = 0.98\)). After testing, the instrument contained 48 items using a 6-point Likert-type scale ranging from strongly disagree (1) to strongly agree (6).

Following the initial testing, phase 2 of the implementation included field-testing the instrument with a larger sample of 88 senior and 43 junior nursing students. Significant findings from this sample indicated that senior nursing students’ perceived faculty as more caring than did junior nursing students. After further analysis of the tool, the researchers decided to eliminate 3 items with correlations of <0.20 with the final version of the tool having 45 items, with 18 of those negative and 27 positive. The estimated Cronbach’s alpha remained at 0.98 (Wade & Kasper, 2006).
In order to determine construct validity, the researchers assessed content validity, factor analysis, and convergent and predictive validity (Wade & Kasper, 2006). As a result, five factors were identified in relation to transpersonal caring in nursing education and included: 1) instills confidence through caring, 2) supportive learning climate, 3) appreciation of life’s meanings, 4) control versus flexibility, and 5) respectful sharing. Eliminating those items not directly related to these five factors, the final NSPIC had 31 items with an internal consistency of 0.97. The researchers acknowledged the five factors that emerged were reflective of the five themes of caring in nursing education identified by Beck (2001). Although a valid and reliable tool, the NSPIC was not chosen for my study as it asks the participant to focus on one particular instructor rather than the program or institution as a whole. This was a problem identified by the initial student participants but was not addressed by the instrument developers.

Studies on the perceptions of caring have continued to evolve particularly in relation to the online learning environments adopted by many nursing institutions. In 2008, Gabbert explored nursing students’ perceptions of their interactions with faculty online. Factors such as age, professional experience, online learning experience and type of program enrolled in were also studied in relationship to their perceptions. A convenience sample of nursing students enrolled in or who had taken an online class in the past year from four different urban and rural institutions in the southwest United States were surveyed using a modified version of the Organizational Climate for Caring Questionnaire (OCCQ). Developed by Hughes (1993), the OCCQ measured students’ perceptions of caring faculty-student interactions. Since the tool was not originally developed for the online environment, Gabbert contacted the author of the tool as well as a panel of five experts on tool construction, online education and theory including Dr. Jean Watson. According to Gabbert:
Dr. Linda Hughes, creator of the OCCQ, indicated that the instrument has proved useful in a variety of clinical and educational setting and was confident of its adaptability to the on-line learning environment involving nursing faculty and the nursing student. (p. 69)

In addition, all five experts indisputably agreed that the tool was appropriate for use in the online learning environment. Of the original four subscales that included modeling, dialogue, practice, and confirmation/affirmation, the subscale practice was removed to reveal a 30-item Likert scale questionnaire.

Study findings indicated students’ perceptions of increased levels of caring faculty-students relationships in the online environment that was congruent with previous studies (Gabbert, 2008). In addition, the investigator found a weak, positive correlation between students’ perceptions and age, with those in the 46 to 60 year age group having increased perceptions of caring and those in the 18 to 25 year age group having the lowest scores. The demographic factor of professional experience, divided as pre and post-RN licensure, also revealed a positive correlation between student perceptions of caring interactions with faculty with the post-RN licensure group having the highest scores across all subscales and total scale scores. This indicated that the post-RN licensure group had increased perceptions of caring faculty-student interactions in their online courses. Gabbert (2008) attributed this finding to this group’s increased experience in the nursing profession and nursing educational process. Furthermore, Gabbert investigated differences in student perceptions and number of online courses completed and found no statistically significant difference.

Gabbert (2008) suggested that continued faculty efforts in understanding the student’s experience in online education are essential and “the development and implementation of a learner-centered on-line nursing pedagogy demonstrating the core nursing values will enhance
faculty-student interactions and could ultimately and positively affect student recruitment and retention” (p. 78). Results from this and other studies have indicated that online learning can be an effective tool for promoting and modeling a caring, supportive learning environment. Further research on how instructors create these caring environments as well as the use of theory to support learner-centered online nursing pedagogy must be explored.

**Best Practices in Online Nursing Education**

As distance education programs have expanded into all academic levels and areas of study, supporters and non-supporters have researched the differences among the learning environments. Studies have focused mainly on student success and outcomes, with many also addressing student satisfaction, student retention, student learning styles, and online teaching strategies. Most studies have found similar outcomes in terms of student success determining that students are just as or more successful in online courses as they are in traditional classroom courses. However, student success and satisfaction in distance courses often times is reflective of the course design and interaction among both faculty and peers. The advent of distance education technologies has profoundly influenced nursing education delivery for the past several decades. More and more institutions now offer some form of distance education format, whether completely online or in a hybrid environment where online strategies supplement face to face class time. Either way, the influence of technology on nursing education has promoted increased quality and access for many students.

In 2001, Billings, Conners, and Skiba wrote an article entitled *Benchmarking Best Practices in Web-Based Nursing Courses*. Billings, et al. used benchmarking as a framework for identifying best practices in online nursing education. A pilot study was conducted surveying three institutions in the central part of the United States that had been using distance technologies...
for several years. The broad variables chosen for benchmarking were outcomes, educational practices, and use of technology. Outcomes included access, convenience, connectedness, preparation for “real world” work, proficiency with technology use, socialization to the profession, and satisfaction. Educational practices included active learning, prompt feedback, time on task, collaboration and interaction among peers, and student-faculty interaction. Finally, use of technology included technology infrastructure and use of technology promotes productive use of time. The tool used was developed by the Flashlight Program’s Current Student Inventory (CSI) tool kit and incorporated aspects of Chickering and Gamson’s (1987) previous work. According to Billings et al., “the Flashlight Program is part of the Teaching, Learning, and Technology affiliate of the American Association of Higher Education” (p. 43). Data were gathered from 219 students in the fall semester of 1999.

Billings et al. (2001), in terms of student outcomes, found that those students who lived farther from campus and older students found online courses more convenient, were more satisfied, and felt less isolated. For the educational practices variable, students reported spending six to ten hours per week on the distance course that did not differ from the time they would spend in the traditional learning environment. In addition, students perceived themselves as active learners and recipients of feedback. However, interestingly, those students that lived farther away felt they received more feedback than students who lived closer to campus. In addition, younger students reported they were less likely to interact with peers in online courses and overall students reported they were somewhat less likely to interact with faculty in online courses. As a result, the authors demonstrated how the results could be applied to faculty, instructional designers, as well as administration in order to improve student outcomes
surrounded by efficient and effective technological measures and strategies aimed at promoting satisfied and competent students.

In a similar effort, Koeckeritz, Malkiewicz, and Henderson (2002) applied Chickering and Gamson’s (1987) *Seven Principles for Good Practice in Undergraduate Education* to online nursing education. These principles are as follows:

1. Good practice encourages student-faculty contact.
2. Good practice encourages cooperation among students.
3. Good practice gives prompt feedback.
5. Good practice emphasizes time on task.
6. Good practice communicates high expectations.
7. Good practice respects diverse talents and ways of learning.

Koeckeritz et al. provided specific examples of how each of these principles applied to the online setting. The authors recommended using these principles as “a framework for ensuring the success of online instruction” (p. 287). They elaborated by stating, “online success results from extensive planning, organized development, timely and thoughtful implementation, clear and frequent communication and, finally, conveying an interest in students and their learning” (p. 287). They noted that the skills necessary for an online educator mimicked those of the traditional classroom educator as evidenced by their work.

**Student Persistence and Satisfaction**

Persistence in both undergraduate and graduate education is a major concern of institutions of higher education. Efforts to increase student retention rates have proven futile over the past several decades. According to ACT, Inc. (2004), despite efforts to improve
Retention rates by many institutions, data collected over the past several decades have shown little change across all types of institutions and levels of study. Determining factors contributing to poor student retention rates and development of interventions to promote retention strategies have been researched and theorized extensively (Astin, 1984; Bean, 1980; Bean & Eaton, 2001-2002; Spady, 1970, 1971; Tinto, 1975, 1987, 1993). However, most of this research has centered on undergraduate education.

Nursing education has also been impacted by poor student retention rates thereby affecting the growing shortage of nurses and nurse educators. Similar to previously reported findings on caring, in 2003, Shelton studied the relationship between nursing students’ perceptions of faculty support and retention rates. A sample of 458 associate degree nursing students was grouped into persistence categories, including those who had persisted continuously, those who had withdrawn on their own and those that had to withdraw due to academic failure. Utilizing Bandura’s (1997) theory of self-efficacy and Tinto’s (1993) theory of student retention, Shelton developed her own model of student retention which “incorporates elements of internal psychological processes with external environmental supports to predict academic performance and persistence” (p. 70). The Perceived Faculty Support Scale, developed by Shelton, measured the students’ perceptions of faculty support during their program of study with two subscales of psychological and functional support. Findings indicated significant differences among the persistence groups with students that persisted throughout their entire program having higher perceived faculty support, both psychologically and functionally. Shelton recommended that faculty provide both psychological and functional support in order to foster caring and promote effective learning.
Additional studies have specifically addressed student persistence in distance education environments. However, Nora and Snyder (2008-2009) noted “that a great deal of what is known regarding the influence of institutional and individual factors on student withdrawal is restricted to students in a campus setting” (p. 5). As online learning has expanded, research in student attrition in distance environments has as well. According to Diaz (2002), dropout rates are much higher for online students than traditional classroom students leading many critics to question the quality of such programs. Diaz challenged critics by acknowledging the differences among online and traditional students, particularly their age, previous college experiences and motivating factors such as time and money. He noted that dropping out of an online course should not be considered an indication of academic failure, but may be a result of what Gibson (1998) reported as factors to predict online attrition. These factors were divided into three categories including student factors, situational factors, and educational system factors. Specifically, student factors included preparation, motivational characteristics, and a sense of academic self-concept. Situational factors included support from family and employers and life changes. Finally, educational system factors consisted of effective instructional materials and adequate tutorial support. Diaz concluded by challenging institutions offering online courses to adequately prepare both at the student, faculty and institutional levels in order to reduce student attrition in online education.

Summary

In summary, this review of literature has provided an in depth review of the concept of caring, including defining, teaching and measuring caring, the theories surrounding the concept, as well as studies on the perception of caring in nursing practice and nursing education. In addition, distance education in nursing was discussed, followed by student persistence data. In
conclusion, caring, although elusive and quite complex, encompasses nursing. Determining ways to promote a caring atmosphere in all nursing course delivery formats is imperative in fostering student satisfaction and persistence.
Chapter 3

Methods

This research study utilized cross-sectional survey methodology to answer the research questions. The purpose of this study was to determine the impact of learning environment, program satisfaction, and persistence on students’ perceptions of faculty caring.

Subjects

This study utilized a convenience sample of graduate nursing students enrolled in a part-time or full-time course of study. Students had completed at least one semester of coursework prior to participation in the study. Subjects were obtained at either a Commission on Collegiate Nursing Education (CCNE) and/or National League for Nursing Accrediting Commission (NLNAC) accredited institution within the East North Central Division of the Midwestern region of the United States as defined by the United States Census Bureau. This region included the five states of Illinois, Indiana, Michigan, Ohio, and Wisconsin with 77 accredited institutions of higher education offering graduate level nursing programs. Graduate nursing students at Indiana State University were excluded from the sample in order to prevent any perceived coercion by the researcher affecting study results. Therefore, the survey was only sent to 76 institutions.

The institutions were located in both urban and rural areas throughout the Midwestern region. It is important to note, however, that numbers of institutions varied among the individual states. All of these institutions offered coursework either in a traditional classroom, distance, or
a hybrid environment. Participants were to indicate in which setting their program of study was offered. The researcher contacted the program directors and/or department chairpersons for each institution indicating the purpose of the research study and requested that they send out the information via electronic mail or post on course delivery sites the instructions on completing the survey to their students that meet the specifications that were indicated.

**Instrumentation**

Demographic information was obtained from the participants prior to survey completion and is reported in Chapter 4. Specific demographic and background information that was requested is noted in Appendix A. The instrument chosen to measure student perception of faculty caring was the Organizational Climate for Caring Questionnaire (OCCQ) developed by Dr. Linda Hughes (1993). Permission to use and modify this tool was granted by Dr. Hughes (personal communication, March 27, 2009). Although originally developed and tested for the traditional learning environment as well as undergraduate nursing students, the OCCQ was utilized by Gabbert (2008) in her study investigating nursing students’ perception of faculty interactions in the online environment. This particular study also explored the relationship between students’ perceptions and several demographic factors including age, professional experience, online learning experience as well as type of program. Furthermore, Dr. Hughes (personal communication, March 26, 2009) voiced no concerns with application of the tool in either the online environment or with graduate nursing students. Gabbert also identified a panel of experts that corroborated the use of this tool indicating “all five of the experts unanimously agreed that the tool measured the concept of creating a caring and supportive learning environment in the on-line learning setting for nursing students and was appropriate for use” (p. 69). One additional tool was found that measured students’ perception of faculty caring (Wade
& Kasper, 2006). This particular tool was based on Watson’s Ten Carative Factors. However, this tool was not chosen for this study because the questions were specific to one particular faculty person rather than the nursing institution in general.

The OCCQ was piloted by Hughes (1993). Cronbach’s alpha reliability coefficients ranged from .88-.92. Content validity was achieved by two content experts (Hughes, 1993). The original 39 item Likert scale questionnaire consisted of four subscales which include modeling, dialogue, practice and confirmation/affirmation incorporated from Noddings’ (1984) work on caring interactions among students and teachers. Based on Dr. Hughes’ suggestion (personal communication, March 26, 2009), the practice scale was eliminated as these questions specifically applied to the clinical setting. This removed nine items from the questionnaire. The modeling subscale consisted of 14 items that addressed modeling of caring behaviors to students. The dialogue subscale had nine items inquiring on communication between faculty and students. The confirmation/affirmation subscale, which consisted of seven items, queried information on the role of faculty in promoting confidence and self-esteem among students. Scores on the OCCQ were summed with the higher total score and individual subscale scores revealing increased perception of organizational caring by the student. Cronbach’s alpha reliability coefficients for this sample were as follows: OCCQ Total .97, OCCQ Modeling subscale .94, OCCQ Dialogue subscale .92, and OCCQ Confirmation/Affirmation subscale .92.

Student persistence was measured by asking the student if they planned to enroll next semester at the same institution. If they answered “no”, they were asked to explain the reason they did not plan to enroll. Furthermore, student satisfaction with their current program was measured by asking them if they were satisfied with their program and if not why.
Procedures

Exempt status approval from Indiana State University’s Institutional Review Board (IRB) was sought and granted for this study. Following notification by the IRB, the researcher contacted via electronic mail the department or program chairperson for graduate nursing programs at all of the identified institutions. The electronic mail contained instructions concerning who was eligible to participate in the study as well as a link to complete the survey. These individuals then forwarded the electronic mail to potential student participants and/or posted the information to course websites. The complete survey was developed using the Qualtrics software system. Participants had approximately six weeks to complete the survey. A reminder email was sent to the program chairpersons after two weeks from the initial email.

Participants were notified prior to starting the survey the purpose and intent of the study. In addition, information on the researcher conducting the survey, how participants were selected, time commitment, benefits and risks were provided. Furthermore, participants were informed that all of their survey results would remain confidential. Informed consent was implied based on completion of survey. They could have elected to proceed with the study or could have chosen to not complete the survey after reading the information contained within the informed consent.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 16.0. The overarching research question that guided this study was as follows:

1. What is the relationship between student program satisfaction and student persistence among the various learning environments of traditional, distance, and hybrid on student perception of faculty caring?
The question was to be tested using a three-way analysis of variance (ANOVA). In the event of a non-significant three-way interaction, then the appropriate two-way interactions and main effects would have been interpreted. The specific two-way interaction questions were as follows:

1. Are there differences in perceived faculty caring among satisfied and unsatisfied traditional, distance, and hybrid learning environments?
2. Are there differences in perceived faculty caring among satisfied and unsatisfied students who plan to persist with their current program and those who do not?
3. Are there differences in perceived faculty caring among those who plan to persist and those who do not in the traditional, distance, and hybrid learning environments?

The main effect questions were as follows:

1. Are their differences in perceived faculty caring between students who are satisfied with their program and those who are not?
2. Are their differences in perceived faculty caring among traditional, distance, and hybrid learning environments?
3. Are their differences in perceived faculty caring between those who plan to persist with their current program and those who do not?

The independent variables for this research question were student program satisfaction, student persistence, and the learning environment which included the traditional, distance and hybrid or combination of both distance and traditional environments. The dependent variable was students’ perception of faculty caring.
Chapter 4

Results

Demographic Data

The previous chapter described the methodology used for the study. Chapter 4 presents the results of the study. Information on the sample is provided first, followed by results of the analysis of variance in response to the research questions noted in Chapter 3.

A total of 76 accredited institutions throughout the East North Central Division of the Midwestern region of the United States were contacted during fall 2009. Graduate program directors and/or chairpersons identified by the accrediting bodies were electronically mailed the survey link and informed consent procedure. Individual institution names were not requested by the investigator; thereby anonymity of findings could be assured and not specifically linked to one particular institution. Three of the contacted institutions chose not to participate in the study for unidentified reasons. Program directors and/or chairpersons were asked to send out the correspondence with the survey link to graduate nursing students that met the inclusion criteria. The only criteria for inclusion in the study were that the graduate nursing student had taken at least one course at their current institution. One question participants were asked is if they attended a private or public institution. Interestingly, each type of institution, private and public, was represented equally with 50%.
A total of 189 surveys were started with 162 completed in their entirety. Those surveys with missing data were eliminated using listwise deletion. The incomplete surveys were however analyzed by the investigator for any patterns that may have been associated with the incompletion of the survey, including age, gender, or the satisfaction variable. No observed connection was noted. Statistical power analysis was conducted using G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). Utilizing Cohen’s (1988) guidelines for eta-squared, 0.14 was used to calculate the effect size $f$. Using an a priori alpha level of .05 and a desired power level of .80, the calculated sample size needed for a large effect was $N = 85$. Subsequently, using the same alpha level and desired power level, in order to obtain a medium effect size the calculated sample size was $N = 207$. Of the 162 respondents, 159 (98.1%) were female and three (1.9%) were male. Age was measured in ranges. Figure 1 illustrates the age ranges of the participants, with 40-59 years having the largest percentage at 50.6% or 82 participants. The majority of the respondents (63.6%) was enrolled full-time and had been in their current program of study for greater than 12 months (74.1%). All three types of programs were represented, with hybrid reported most frequently at 48.8%, followed by all online at 38.3% and traditional classroom at 13.0%.

When asked if satisfied with their program and institution, 147 or 90.7% responded “yes” and 15 or 9.3% responded “no”. Those that responded “no” were asked why. Comments ranged from one or two sentences ($n = 10, 66.67\%$ of the 15 responses) to six or more sentences ($n = 5, 33.33\%$ of the 15 responses). Of the total 15 responses, 8 or 53.33% occurred in the hybrid program of study, 4 or 26.67% in the online program of study, and 3 or 20% in the traditional program of study. It was not the intent of this study to fully analyze this qualitative data. However, responses were read and several themes emerged with many of the comments
addressing multiple issues. The most frequent comments addressed too demanding workloads for working students, followed by self-instruction by students, poor communication, and inconsistencies or poor curriculum design.

![Pie chart showing age ranges of participants]

**Figure 1.** Age ranges of participants

**Students’ Perceptions of Faculty Caring**

As previously discussed, students’ perceptions of faculty caring at their institution was measured using the Organizational Climate for Caring Questionnaire (OCCQ). This questionnaire included three subscales: modeling (14 items), dialogue (9 items), and confirmation/affirmation (7 items). Participants were asked to answer which of the six responses listed best described the climate or atmosphere at their current institution ranging from 1 (strongly disagree) to 6 (strongly agree). Higher scores on the OCCQ revealed an increased perception of faculty caring interactions, with a maximum total score of 180 points. The total
mean score on the OCCQ for all participants ($N = 162$) was 142.36 ($SD = 29.57$) indicating an overall increased perception of caring student-faculty interactions. Scores ranged from 49 -180.

**Analysis of Variance**

In order to measure student persistence, students were asked if they planned to enroll at the same institution next semester, and if not, why. These data provided valuable information that led to a change in the proposed study research question and subsequent analysis of variance. The proposed analysis involved three independent variables: program satisfaction, persistence, and type of program. However, after reviewing the descriptive data, 139 or 85.8% planned to enroll next semester at the same institution and 23 or 14.2% did not. When reviewing the qualitative responses as to why they did not plan to enroll, 23 or 100% of the respondents reported that it was due to graduating from the institution. As a result, the independent variable persistence was not used in the analysis of variance as there was no variance in persistence in this sample.

This serendipitous finding rendered the original research question inapplicable as the independent variable persistence no longer proved beneficial to the study’s analysis. As a result of eliminating this variable, a two-way between-subjects factorial ANOVA, specifically 2X3, was appropriate, thereby rendering the following research questions from the original proposal:

1. Are there differences in perceived faculty caring among satisfied and unsatisfied traditional, distance, and hybrid learning environments? (Two-way interaction)
2. Are their differences in perceived faculty caring between students who are satisfied with their program and those who are not? (Main effect)
3. Are their differences in perceived faculty caring among traditional, distance, and hybrid learning environments? (Main effect)
The assumption of equal variances was tested using Levine’s test and was met, $F(5, 156) = 1.438, p = .214$. Figure 2 presents the mean OCCQ scores by levels of program type and reported satisfaction.

![Chart](chart.png)

**Figure 2.** Mean OCCQ scores by levels of program type and satisfaction

As Figure 2 illustrates, among those students that were satisfied with their program, traditional classroom students scored higher on the OCCQ ($M = 159.22$) as compared to all online students ($M = 154.26$) and hybrid students ($M = 139.70$). For those students that were not satisfied with
their program, all online students scored higher ($M = 93.00$) than hybrid ($M = 88.25$) and traditional classroom students ($M = 84.33$).

The results of the analysis of variance are illustrated in Table 2. There was no significant interaction effect between student satisfaction and type of program on students’ perceptions of faculty caring, $F(2, 156) = 1.13, p = .33$, two-tailed, $\omega^2 = < .01$. Thus, the main effects of both satisfaction and type of program were analyzed.

Table 2

*Analysis of Variance*

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>1</td>
<td>44257.74</td>
<td>92.88</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Program type</td>
<td>2</td>
<td>542.76</td>
<td>1.14</td>
<td>0.323</td>
</tr>
<tr>
<td>Sat X Program type</td>
<td>2</td>
<td>537.92</td>
<td>1.13</td>
<td>0.326</td>
</tr>
<tr>
<td>Error</td>
<td>156</td>
<td>476.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p = <0.05, two-tailed

There was a significant main effect for satisfaction on students’ perception of caring, $F(1, 156) = 92.88, p = < .001$, two-tailed, $\omega^2 = .36$, indicating satisfied students ($M = 147.84$) perceived their faculty as more caring than unsatisfied students ($M = 88.73$). Omega squared indicated that approximately 36% of the variance in OCCQ scores could be explained by student satisfaction, which according to Cohen’s (1988) guidelines would be a medium effect size.

The main effect for type of program, i.e. online ($M = 150.31$), traditional ($M = 148.52$), and hybrid ($M = 134.49$) was not significant, $F(2, 156) = 1.139, p = .323$, two –tailed, $\omega^2 = < .01$. 
Chapter 5

Summary and Discussion

This final chapter briefly reviews the problem statement, study methodology, and provides a summary of the results previously reported. The majority of the chapter focuses on a discussion of the results and their implications.

Review of Study Design and Results

As discussed in Chapter 1, this study was designed to determine the impact of learning environment, student satisfaction, and persistence on students’ perception of faculty caring. Few studies have been conducted that address the perception of caring in nursing education, particularly when applied to different learning environments. Furthermore, quantitative methodologies have been used infrequently in studying the caring phenomenon despite recommendations to do so (Swanson, 1999; Valentine, 1991; Watson, 2002). Although modeling of caring behaviors has been identified as highly influential (Beck, 2001; Kelly, 1992; Nelms et al., 1993), it is unclear if this can be transferred into the distance learning environment. Additionally, a gap in the literature exists describing the relationship between perceived caring with program satisfaction and persistence rates among graduate nursing students.

This study used cross-sectional survey methodology to answer the research questions. The sample participants were enrolled at one of the 76 accredited institutions contacted within the East North Central Division of the Midwestern region of the United States, which included
the states of Illinois, Indiana, Michigan, Ohio, and Wisconsin. A convenience sample of 162 graduate nursing students that had finished at least one semester of coursework completed the survey in its entirety. The survey was administered online and consisted of demographic questions, a question on their satisfaction with their program, a question on their plans to enroll next semester, as well as the Organizational Climate for Caring Questionnaire (OCCQ). The original research question that guided the study was as follows:

1. What is the relationship between student program satisfaction and student persistence among the various learning environments of traditional, distance, and hybrid on student perceptions of faculty caring?

After reviewing the responses, a high persistence rate was noted (85.8%). Upon further analysis, 100% of those respondents that reported they did not plan to enroll next semester identified the reason as graduation. Therefore, the persistence variable was excluded from the analysis. A two-way analysis between-subjects factorial ANOVA was conducted to answer the following research question:

1. Are there differences in perceived faculty caring among satisfied and unsatisfied traditional, distance, and hybrid learning environments?

Results of the factorial ANOVA revealed no significant two-way interaction. The main effect of type of program, online, traditional, or hybrid, was also not significant. However, the main effect of satisfaction was significant ($p < 0.01$).

**Discussion of Results**

Fiscal concerns, student success and student satisfaction have influenced the need to research and evaluate student retention strategies employed at institutions of higher education. Although past efforts to substantially improve retention rates have proven ineffective, research
on student attrition continues to offer support and enlighten this concern that continues to grow. Perhaps the most unexpected and interesting finding of this study was the persistence variable results. Participants in this study were asked if they planned to enroll at the same institution next semester, and if not, why. Although this question would exclude those students transferring to another institution, it was felt this would better determine persistence toward their goal and would possibly have some bearing on how they perceived faculty caring at that institution. Interestingly, although it was a small sample of the population, participants in this study had a 100% retention rate, as all of those reporting they did not plan to enroll next semester at the same institution were graduating. This finding does not support the retention literature cited in Chapter 2, which indicated that student attrition at most institutions remains very high, particularly among distance students. Only 13% of the students sampled reported being enrolled in the traditional classroom setting. Therefore, the majority (87%) were taking classing completely online or in a hybrid environment.

Perhaps the contributions to this serendipitous finding can be found in the demographic make-up of the participants. Although students were only required to have completed one semester of coursework to participate in the study, an overwhelming majority (74.1%) had been in their program for greater than 12 months, and another 11.7% for 6 to 12 months. The inclusion criteria could have affected recruitment efforts of the program directors and chairpersons making it easier to target those finishing their programs of study. Undergraduate retention research has shown that if students are going to drop out, they are more likely to do so in their first year of study (ACT Inc., 2004). Research on graduate student attrition has not been conducted to the extent as it has been in undergraduate. However, application of the findings can be relevant to graduate education as well. For this study, new graduate students were not
targeted specifically. Therefore, persistence may not have been an issue with this sample as many were nearing the end of their degree program. However, having participants that had completed more study at their institution may have led to a better understanding of the program, including delivery method, and may have enabled them to have had more caring or non-caring interactions.

Furthermore, age may have been a contributing factor to the unexpected findings. The most frequently reported age ranges were 40-59 years at 50.6% followed by 25-39 years at 38.3%. This supports Bankert and Kozel’s (2005) statement that “as older adults return to formal education, they are typically highly motivated and committed to learn” (p. 227). In addition, Diaz (2002) recognized that online students were generally older and had more life and educational experiences. Therefore, this sample of students was more likely to persist due to a variety of motivating factors. In addition, family responsibilities in this age group may have changed significantly for many students making formal educational pursuits more successful.

Finally, the persistence data could be explained by the high levels of program and institutional satisfaction reported by the students. The more satisfied students are with their institution, the more likely they are to persist at that institution (Borden, 1995; Levy, 2004; Suhre, Jansen, & Harskamp, 2007). In addition, Astin (1993) noted that attention to student satisfaction is necessary in order to reduce student attrition. However, if this sample would have consisted of more unsatisfied students, those students that remained at the same institution may have been much fewer. As a result of this unexpected finding, persistence was excluded from the analysis of variance conducted leading to the exploration of a two-way interaction effect only.
No significant two-way interaction between student satisfaction and type of program was found. This indicates that the interaction between these two variables did not explain any of the variance in the OCCQ scores, or students’ perceptions of faculty caring. However, in reviewing the OCCQ scores by levels of program type and satisfaction, it is interesting to note that for satisfied students, those enrolled in traditional and online courses scored higher than those in the hybrid courses. For unsatisfied students, scores were higher for online and hybrid students rather than traditional students. Albeit not significant findings, the results do indicate that among satisfied or unsatisfied students, those in online environments felt cared for just as well if not better than students in traditional classrooms. Therefore, the learning environment did not play a role with satisfaction in determining if the students’ perceived their faculty as caring. This lends support to previous research in which the effectiveness of the faculty or role modeling has a greater effect on student satisfaction then the actual learning environment (Jairath & Stair, 2004; Runquist, DeLaO’Kerns, Fee, Choi, & Glittenberg, 2006; Sternberger, 2002). Discussion of the main effects of satisfaction and type of program provide further enlightenment.

Although there was no significant interaction effect, the main effect of student satisfaction was significant indicating that satisfied students perceived their faculty as more caring than unsatisfied students. Research has found that caring promotes both personal and professional growth, which translates into satisfied students (Beck, 2001). Additional studies have focused on describing caring aspects among faculty that lead the student to a sense of self-growth and becoming (Appleton, 1990; Halldorsdottir, 1990; Miller et al., 1990). As students perceive their faculty as caring, their ability to care for themselves and others leads to more satisfying educational and professional experiences. Although specific information on how the students self-reported satisfaction was not obtained, indicators of a caring learning environment
identified by the OCCQ subscales of modeling, dialogue, and confirmation/affirmation support previous research on those factors identified by students and faculty as caring (Cohen, 1993; Forsyth et al., 1989; Simonson, 1996). These factors, thereby lead to caring interactions among students and faculty, which foster increased student satisfaction regardless of learning environment. Again, the particular demographic make-up of the sample may have contributed to this significant finding. As previously reported, the majority of the sample consisted of older adults. According to Low (2000), some demographic characteristics are evident among satisfaction scores for all institutional levels. She has found that “student satisfaction scores tend to increase with age” (p. 12). Furthermore, females tend to score higher than males on satisfaction surveys. This particular sample, although indicative of the population studied, was 98.2% female. Due to this, study findings can only be generalized to the female population.

Exploring why students reported not being satisfied, thereby feeling less cared for by their faculty, can provide further insight into this variable. Students that responded that they were not satisfied with their current program and institution were asked why not. Those students in the hybrid program of study responded most frequently at 53.33%. This could simply reflect the number of student participants in this program type, as hybrid students were most represented at 48.8% of the total sample. However, this could be a result of hybrid programs not fully embracing the advantages and flexibility that comes with fully online programs, thereby increasing student dissatisfaction in meeting student needs with these program types. No specific empirical evidence was found to support this conclusion. However, we do know that students are drawn to online programs because of their accessibility and flexibility in providing further educational opportunities (Billings, 1999; Billings et al., 2001; Soon, Sook, Jung, & Im,
2000). Graduate students, in particular, need easy access in order to pursue career advancements while maintaining current employment, which is vital to the nursing workforce.

In addition, the most frequently reported reason for dissatisfaction among the sample was increased workloads making the programs too demanding for working students. Although work status was not obtained from the sample as part of the demographic data, information on the qualitative data as well as general knowledge on graduate nursing students implies most were working part-time, if not full-time. Interestingly, 63.6% of the participants reported being enrolled full-time in their program of study. Managing occupational and domestic responsibilities may have contributed to dissatisfaction among the students particularly in inflexible learning environments.

Unsatisfied students also reported issues with faculty, which included instructional techniques, poor communication and poor curriculum design. These issues support research on non-caring behaviors and their negative influence on students’ perceptions of caring, which revealed disconnected student-teacher relationships (Halldorsdottir, 1990; Nelms et al., 1993). Furthermore, they negate efforts to enhance effective learning through the good practices established by Chickering and Gamson’s (1987) work. These negative comments by students, however, may be a result of several additional factors supported in the literature, including inadequate advisement, not self-selecting into program type, inadequate use of technology, differing learning styles, as well as a lack of understanding of online pedagogical teaching principles (Aragon, Johnson, & Shaik, 2002; Billings, 2007; Billings, Connors, Skiba, 2001; Koeckeritz et al., 2002; Thiele, 2003; Thiele, Allen, & Stucky, 1999).

The main effect of program type, i.e. all online, traditional, or hybrid, was not significant. Therefore there was no difference in students’ perceptions of faculty caring among the three
program types. However, among this sample, online students perceived their faculty as more caring ($M=150.31$) compared to traditional ($M=148.52$) and hybrid ($M=134.49$). This provides further evidence to support proponents of distance education. Descriptions of caring behaviors and caring interactions have been studied extensively as noted in Chapter 2. However, as a call for more quantitative methodologies and exploration of online learning environments and the caring concept has occurred, results from this study provide further confirmation for previous qualitative findings indicating that caring can be conveyed in an online environment (Leners & Sitzman, 2006; Sitzman & Leners, 2006). Furthermore, as Gabbert (2008) found, online students overall did perceive their faculty as caring.

Research has shown that modeling caring through student-student and student-faculty interaction is the key to providing effective learning environments (Beck, 2001; Cohen, 1993, Kelly, 1992, Nelms et al., 1993). Results from this study indicate that caring can be modeled in the online environment as in traditional learning environments. As distance education nursing programs have expanded over the past decade largely in an effort to meet societal demands for nurses, nurse educators have explored ways to enhance and promote student outcomes. The best practices in online education have been cited as corresponding to those behaviors found as caring by students (Sitzman & Leners, 2006) and have been offered as support to nurse educators teaching online courses (Billings et al., 2001). Incorporating these practices into online education can further illustrate how caring behaviors can be modeled thereby promoting satisfied students that complete their programs.

**Recommendations for Further Research**

It is evident from the results of this study that further empirical investigations into the caring concept are necessary in order to understand how this phenomenon impacts student
persistence and student satisfaction among various learning environments. Although persistence was excluded from the analysis of variance, insights into the reasons behind such an analogous sample provide further support for research on student persistence. Determining if faculty caring is a contributing factor could help determine poor attrition among nursing students and could lead to a better understanding of the caring concept in nursing education. In addition, it is recommended that further research with larger samples focus on nursing student persistence and the type of learning environment. As nursing programs continue to expand their online programs, it is imperative to determine retention rates among undergraduate and graduate nursing students enrolled in distance programs and identify those factors affecting nursing students in particular in order to ease the effects of the nurse and nurse educator shortage.

Student satisfaction is a vital component in promoting successful student outcomes and increasing retention rates. Identifying those factors that lead to increased or decreased student satisfaction is critical in order to foster effective learning environments. These factors will likely vary depending on type of program and learning needs of the student. It is therefore recommended that further research investigate learning needs for promoting student satisfaction among various learning environments, so that nursing educators can adapt their programs and specific courses to meet student needs and expectations.

Finally, the concept of caring should continue to be explored particularly using quantitative methodologies in order to endure scientific scrutiny (Valentine, 1991) and promote the science of caring (Swanson, 1999; Watson, 2002). Specifically, it is recommended that further insight into those behaviors and other contributing factors leading to decreased student perceptions of faculty caring be investigated. In addition, although this study showed that caring can be modeled in the online environment, exploring if caring is modeled differently amongst the
various learning environments could clarify and provide additional clarification into this elusive concept.

**Limitations**

The convenience sampling procedure utilized in the study limited the generalizability of the research findings. Furthermore, the small geographical region investigated does not allow generalizability to all institutions throughout the United States or other countries. The sampling technique may also have impacted the persistence variable findings, as program directors and department chairpersons may have felt like it was easier to contact those students near program completion in order to meet inclusion criteria. In addition, the concept of caring may not have been part of each institution’s overt or formal curriculum and this information was not known by the researcher. Therefore, how students perceived caring may have been impacted by their lack of knowledge of the concept and science of caring as an integral part of nursing education and subject to their own interpretation.

Another limitation of the study was the small sample size, particularly among certain groups such as those that were not satisfied ($N=15$). Students that completed the survey may have done so because they were satisfied and more likely to complete a survey of this nature, with those less satisfied simply choosing not to complete the survey. Furthermore, how the construct of satisfaction was measured with only one question may have affected the study outcomes. Specific dimensions of the satisfaction variable were not explored thereby limiting the robustness and losing the richness of this construct. That only one significant difference was found in this study may have been a result of measurement error. Similar future studies should attempt to address these limitations.
Implications for Nursing Education and Conclusion

As students feel cared for by their faculty, they are more satisfied with their programs and institutions, which may lead to better outcomes and increased student retention rates. In addition, nursing students that feel cared for are more likely to transmit that behavior to patients and increase their overall satisfaction with the profession. This reciprocal effect is what led nurse educators to first explore caring as a central focus in nursing education. As caring remains a core value in nursing, it is important to sustain its value and place in nursing education. Nurse educators should be aware of both caring and non-caring behaviors and the impact they have on student satisfaction and student persistence. As Liegler (1997) noted, “the students’ sense of satisfaction, or the degree to which nursing programs meet their needs and expectations, contributes to intellectual, social, and affective growth and change” (p. 357).

Results from this study indicate that unsatisfied students feel less cared for by faculty due to a variety of reasons including increased workloads that are too demanding for working students, poor communication, and poor instructional or curricular design. Designing programs that enable the working student to efficiently and effectively accomplish their goals can improve both student satisfaction and persistence. In addition, awareness of the seven principles of good practice (Koeckeritz et al., 2002) and best practices in online education (Billings et al., 2001) can assist faculty in providing effective caring interactions that facilitate positive learning outcomes thereby increasing satisfaction and persistence.

Findings from this study indicate that modeling can occur in the online learning environment as in traditional learning environments. Nursing faculty need to be aware of their actions and inactions in the distance education environment, just as if they were in the traditional classroom setting. In order to foster meaningful student-student and student-faculty interactions,
nursing institutions must endorse caring practices among their faculty (Tanner, 1990). However, Watson (2005) in her theory of transpersonal caring noted, “in relation to caring community work, real or virtual, the power of the teacher, or faculty, or leader alone is not the only power (p. 207). More important is the entire learning group. Therefore, faculty should examine their learning communities ensuring that they cultivate and encourage interactions among all participants.

Results from this study contribute to the overall body of knowledge surrounding the science of caring in nursing. As more and more institutions implement distance education programs in nursing, understanding how caring is modeled in this environment and how it impacts student satisfaction and persistence is key to student success and learning. Graduate nursing students are a particularly interesting group, due to a variety of potentially influencing factors such as age and previous nursing experiences, as well as the non-traditional roles seen among this group of students. However, understanding the caring concept among all levels of learning can assist nurse educators in determining those factors that most influence how students perceive faculty thereby increasing satisfaction and persistence.
References


http://www.aacn.nche.edu/education/essentials.htm


http://www.act.org/path/postsec/droptables/pdf/AllColleges.pdf


http://www.technologysource.org/article/online_drop_rates_revisted/


Shelton, E. N. (2003). Faculty support and student retention. *Journal of Nursing Education, 42*(2), 68-76.


APPENDIX A: DEMOGRAPHIC QUESTIONNAIRE

1. What is your gender?
2. What is your age?
   - 18-24 years
   - 25-39 years
   - 40-59 years
   - >60 years
3. What type of program are you currently enrolled in?
   - All online
   - Traditional classroom, face-to-face
   - Hybrid- mixture of online with traditional classroom
4. What is your enrollment status?
   - Full-time
   - Part-time
5. How long have you been in the program?
   - 0-6 months
   - 6-12 months
   - >12 months
6. What type of institution are you enrolled in?
   - Private
   - Public
7. Do you plan to enroll next semester at this same institution? If no, why?
8. Are you currently satisfied with your program and institution? If no, why?